Appendix A

Plan II Retirement Age Study Resolution

As authorized by the Joint Committee on Pension Policy

Plan II Retirement Age Study Resolution

As authorized by the Joint Committee on Pension Policy, October 1990

Content

- Research and compile specific information about employee problems with, and perceptions of, the current Plan II retirement ages, (age-58 in LEOFF, age-65 in PERS and TRS.)
- Research and compile information on the impact of Plan II retirement ages on employers covered by the systems.
- Identify and develop approaches to resolving employee and employer problems.
- Provide background information on demographics, Social Security, medical costs, etc.
- Investigate physical and mental limitations of age and service as a basis for early retirement.
- Study the role of employee and employer options.
- Recommend specific subjects for future study.

Methodology

- Contact employee groups for assistance in creating a more specific definition of their problems with Plan II retirement ages. Elicit suggestions and comments on various types of proposals.
- Contact employers to determine the impact of Plan II retirement ages on their personnel system. Elicit suggestions for possible solutions.
- Survey other states for creative solutions.
- Utilize the expertise and resources of the state's higher educational institutions and agencies.
- Utilize the information and findings of Workforce 2000.
- Provide costs, actuarial and otherwise, for all proposals.
- Collect information on retirement age trends in the private sector.

Guidelines

- It is assumed the state does not want to significantly increase its retirement costs.
- Similarity between the provisions of the Plan II systems is to be maintained.
- Equal cost-sharing between the employer and the employee is to be maintained.
- Plan benefits are to be provided primarily for the purpose of retirement.
- The solutions developed will be long-term, as opposed to short-term.
- Completion of the Draft Report is targeted for the July 1991* meeting of the JCPP.

* Amended May 1, 1992

Appendix B

U.S. Population Demographics

Staff presentation to the
Joint Committee on Pension Policy, May 21, 1990

SHIFTING INTO THE TWENTY-FIRST CENTURY

The Demographics of Change

During the next forty years a major population shift will have a profound effect on the social fabric of the United States. That shift has been identified with the familiar tag line, "the aging of America." The age 65 and over group is now and will continue to be the fastest growing age group in our population. By the year 2000 people over 65 will make up 13.17% of the nation's population, increasing to an estimated 21.8% by 2030. [1] **Figure 1.1** illustrates the increasing proportion of the population age 65 and over. The three main causes of the over 65 population explosion are 1) increases in longevity; 2) the aging of the baby boom generation; and 3) a declining birth rate. This report will examine those causes and explore their potential effect upon the Washington state retirement systems.

1 All population data used in this report are taken from **U.S. Bureau of the Census, Current Population Reports**, Series P-25, No. 1018, *Projection of the Population of the United States by Age, Sex, and Race: 1988 to 2080*, by Gregory Spencer, U.S. Government Printing Office, Washington, D.C., 1989, except as otherwise noted. The report contains three series of projections, low, middle, and high, each based upon different assumptions. The figures used in this report are drawn from the middle series of projections.

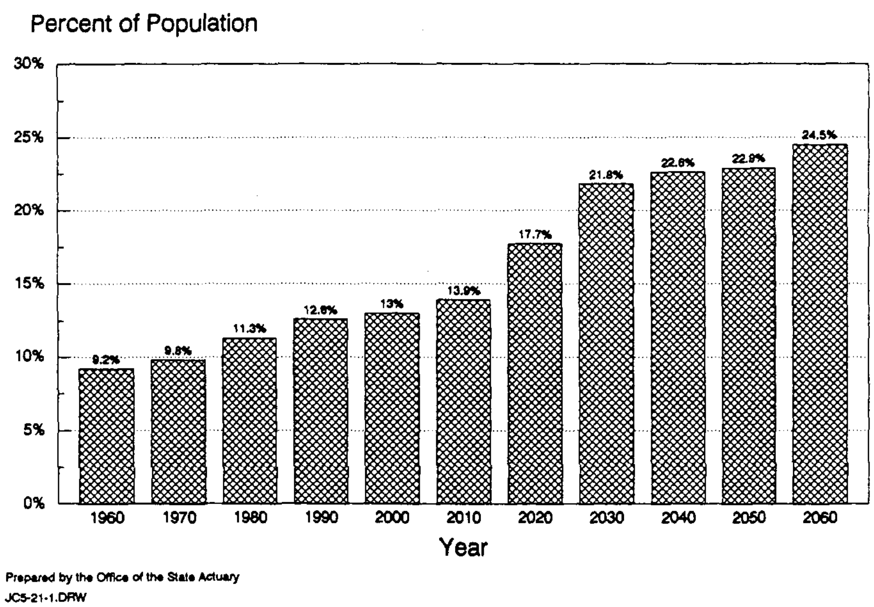
I. CAUSES OF THE DEMOGRAPHIC SHIFT

A. THE INCREASING AMERICAN LIFESPAN

The twentieth century has witnessed a marked increase in the life expectancy of the American worker. In 1940, five years after the introduction of Social Security, the life expectancy at birth was 61.6 years for men and 65.9 years for women.[2] Barring any unforseen breakthroughs in technology or medical science, average life expectancy in 2030 will be 75.4 years for men and 82.3 years for women.

Figure 1.1

PERCENTAGE OF POPULATION AGE 65 AND OVER



2 **President's Commission on Pension Policy**, Staff working paper, *Varieties of Retirement Ages*, by Elizabeth L. Meier and Cynthis C. Dittmar, Revised January 1980, page iv.

Figures 1.2 and 1.2a display the history and projected future of life expectancy at birth and at age 65, respectively.

Figure 1.2

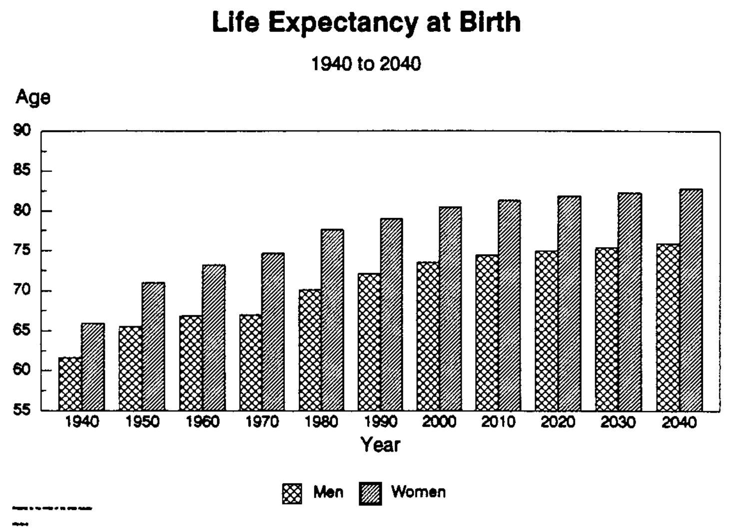
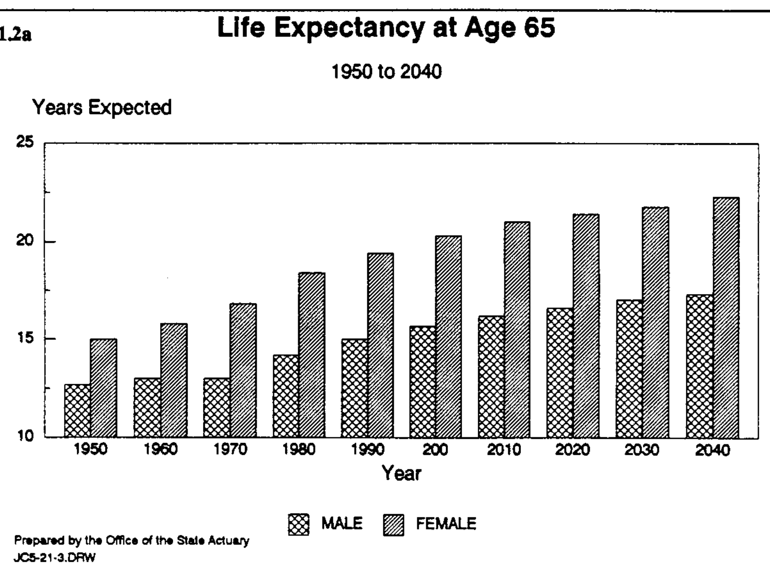


Figure 1.2a



The increasing American lifespan is a function of medical advances that have taken place since the mid-nineteenth century. These medical advances can be divided into three periods: the first period runs from before 1885 to the mid 1930s. This period is known as the "age of environment". It was during this period that health care procedures began to recognize the effect that environment has on health. Public health departments were created and sanitation became a major concern, resulting in a sharp decline in the death rate.

The second era lasted from the 1930s to the 1950s and is referred to as the "age of medicine". It was during this period that immunization and antibiotics such as penicillin were introduced. Again these advances in the understanding of the nature of disease brought about a marked drop in the death rate. The third era, "the age of lifestyle" stretches from the 1950s to the present. Decreases in the death rate through medicine and technology have leveled off. The most recent declines in the death rate are a function of the increasing concern for proper diet and exercise. **Figure 1.3** charts the decline in the death rate from 1885 through 1985.

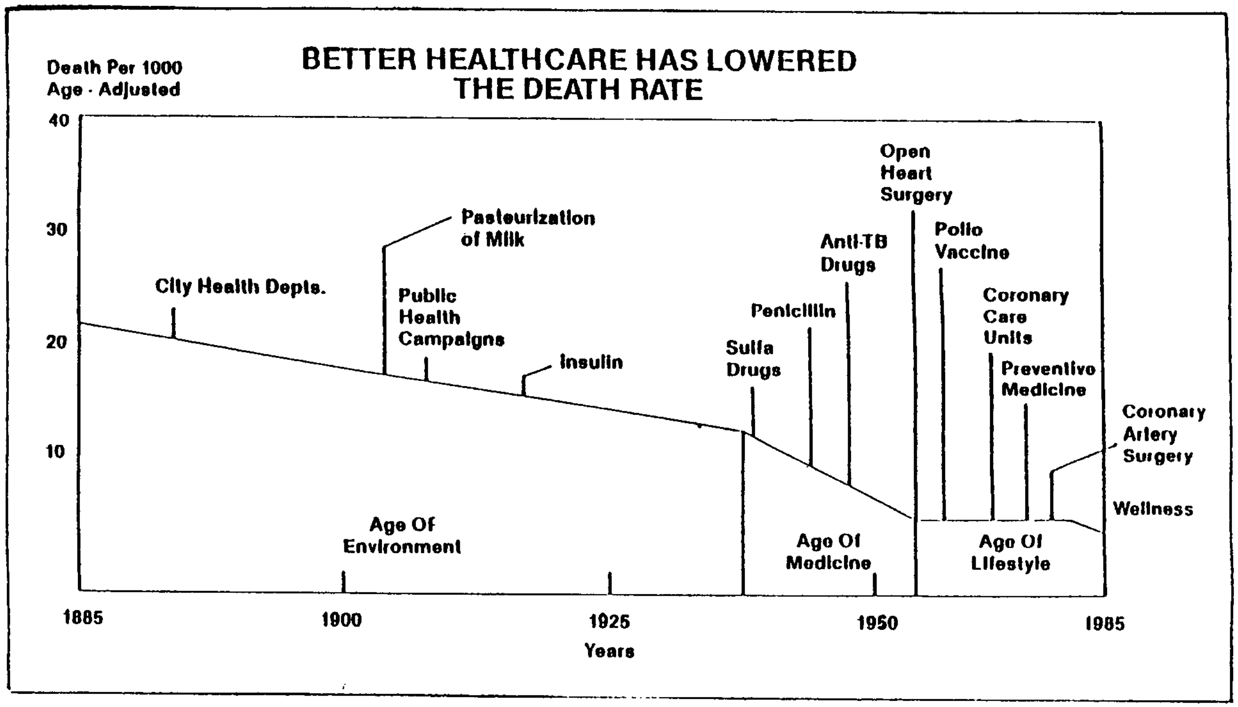
The increases in longevity predicted for americans comes at a time when a huge portion of the population is poised to take advantage of it. The aging of the baby boom generation means not only that people will be living longer, but that more and more people will be living longer.

B. THE SENIOR BOOM

Between 1946 and 1964, 76 million babies were born. This generation, commonly referred to as the baby boom, constitutes almost a third of the population of the United States. The baby boomers, however, are no longer babies. They have established a firm beachhead into middle age, being, as of the time of this writing, between 26 and 44 years old. By the end of the century, only ten years away, they will be on the verge of becoming a "senior boom".

The Wall Street Journal likened the aging of the baby boom generation to the movement of a pig through a python. The baby boomers push ahead, drastically altering every age group that they enter. **Figure 1.4** is a

Figure 1.3



Source: *The Aging of America*
The Shape of Things to Come
by Bruce Clark, DHSc

series of graphs that portray the effect that the aging of the baby boom will have on the demographics of american society up through the year 2030. Note that as the baby boom generation pushes its way into the future it profoundly alters the shape of the graph. In 1987, when the baby boomers were 23 to 41 years old, the age distribution resembled a bottle a Chianti. In 2030, when the baby boomers will have pushed their way to age 70 and beyond the age distribution looks more like a beer keg. The current median age of 33 is both the highest ever and lower than it will ever be again.

The effect that the aging of the baby boom has on society will be exacerbated by the third cause of the coming demographic shift, the declining birth rate.

C. THE BABY BUST

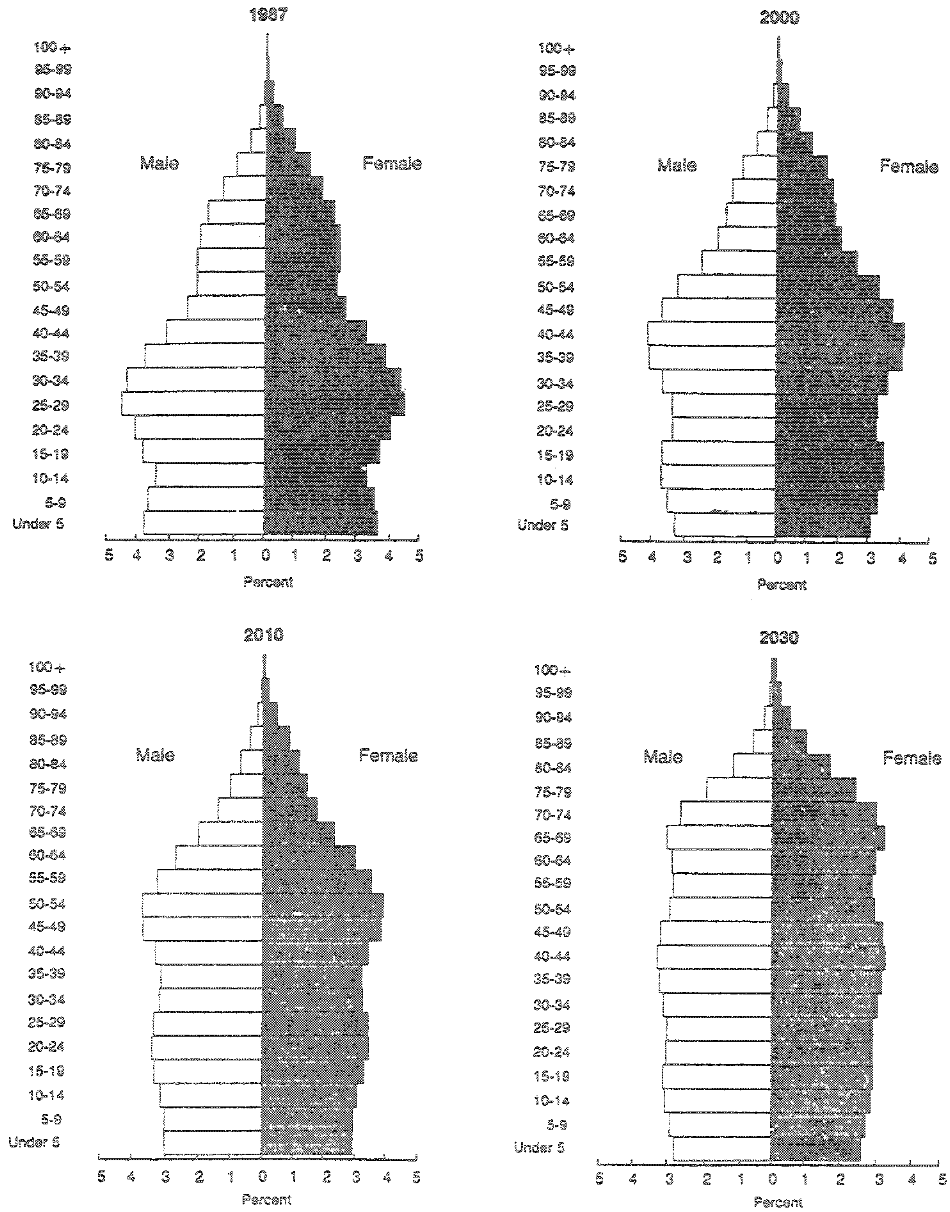
In 1940 the nation's fertility rate was approximately 2.2 births per woman. Then came the baby boom which peaked in 1960 with women averaging more than 3.6 births. Pundits predicted that the sixties, when the baby boomers were first entering their child-bearing years, would witness an even greater profusion of children as the baby boom boomed. The expected wave of births never materialized, however.

The baby bust refers to the dramatic decline in the birth rate due to an increased use of birth control, increased female labor force participation, an increase in age at first marriage, and an increase in the divorce rate. The current national fertility rate has plateaued at approximately 1.8 births per woman. **Figure 1.5** plots the changes in the national fertility rate over time. Because of the baby bust, younger people will be a decreasing portion of the nation's population in the future.

The demographic shift caused by the increases in longevity, the aging of the baby boom and the declining birth rate will effect all aspects of American society. The remainder of this report will focus on the implications that the demographic shift holds for the Washington state retirement systems.

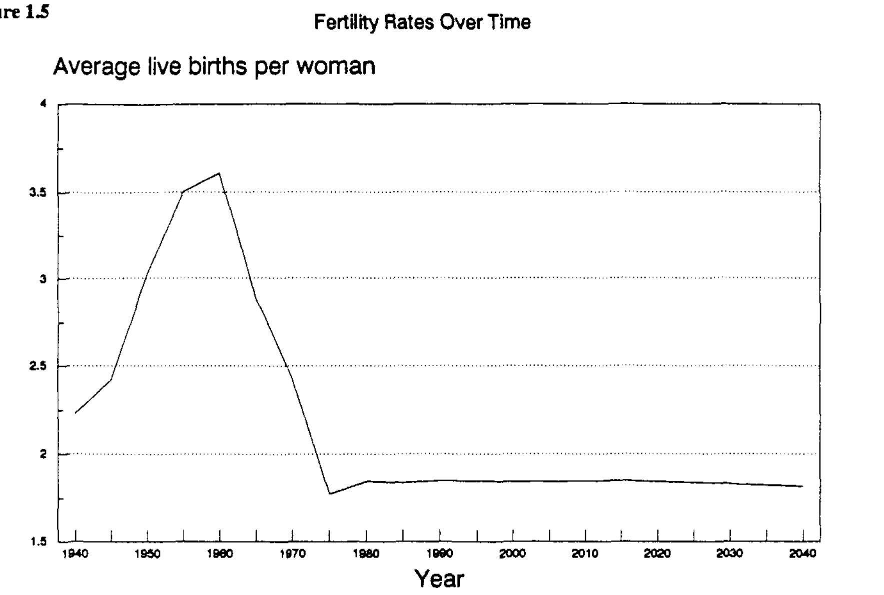
Figure 1.4

Age Distribution of the U.S. Population: 1987, 2000, 2010, and 2030



SOURCE: See Footnote [1]

Figure 1.5

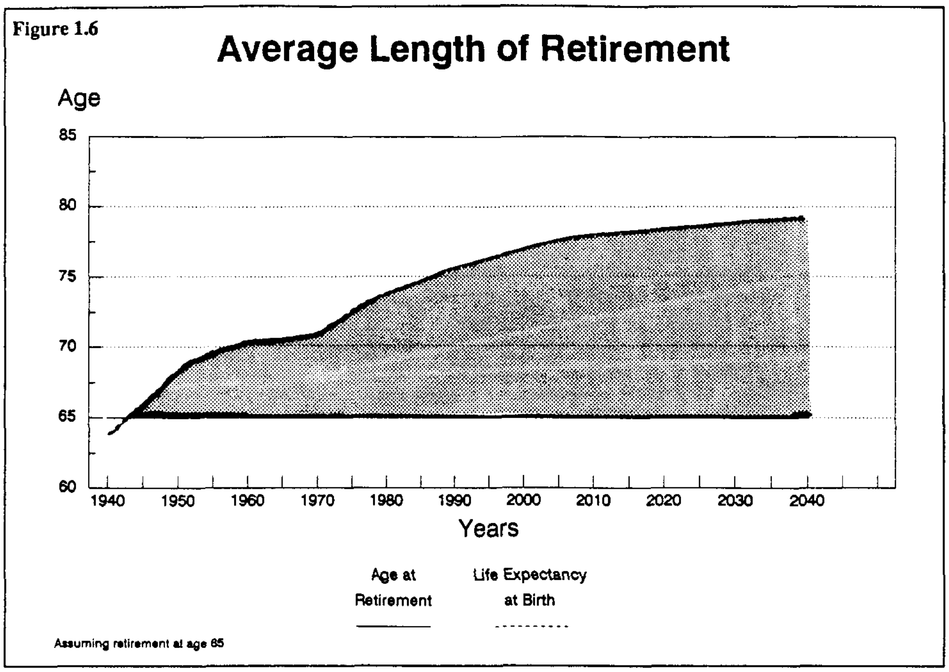


II. EFFECTS OF THE DEMOGRAPHIC SHIFT

The first implication of the increase in longevity is that more people are living to retirement age. In 1940, shortly after the institution of 65 as the national retirement age, the average life expectancy was such that most people would never live to collect a retirement pension. Today, however, 73.1% of the population lives to be age 65 or older. By 2030 that percentage will increase to 81.8%. Almost every worker who is alive today is going to stay around long enough to collect a pension.

Not only are most people living long enough to collect retirement, people are living longer after they retire. A person retiring at age 65 today will spend 15 years as a retiree if male, 19.4 years if female. In 2030 the average male retiring at 65 will spend 17 years as a retiree, the average female 21.8 years. **Figure 1.6** demonstrates how the expected length of retirement has increased from -1.25 years in 1940 to a projected average of 19.4 years in 2040.

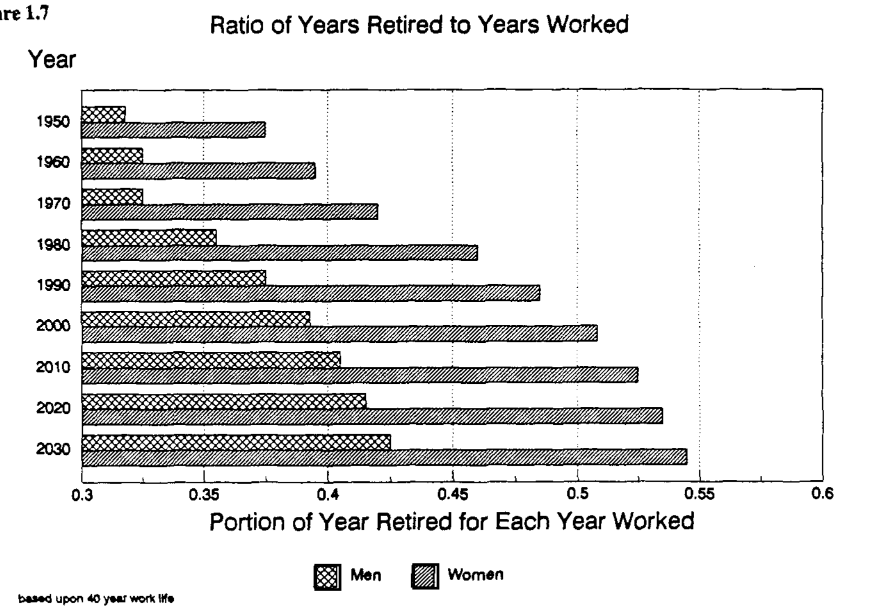
Figure 1.6



The increased lifespan of the population as a whole means that people will be more active in their later years than ever before. More activity implies more consumption which requires more income. Even if retiree consumption does not increase, the simple fact that retirees will be receiving benefits over a longer period of time means that inflation will cause greater erosion of the purchasing power of the benefit. Even the low rates of inflation that we are currently experiencing will greatly reduce the value of a fixed benefit given the passage of enough time.

Increased lifespan also means that the ratio of years that a person is retired compared to the number of years that he or she works will increase. That means that a person will have to save more during each year of their working life in order to have enough money set aside for their longer, more active retirement. **Figure 1.7** demonstrates the increase over time in the ratio between years retired and years worked. According to **Figure 1.7**, by 2030 the average person will be spending one year as a retiree for every two years worked. Note that **Figure 1.7** assumes a retirement age of 65. The actual average retirement age for state employees is lower; 62 for PERS and 60 for TRS. The ratios represented in **Figure 1.7** are, therefore, understated for Washington Retirement System retirees.

Figure 1.7

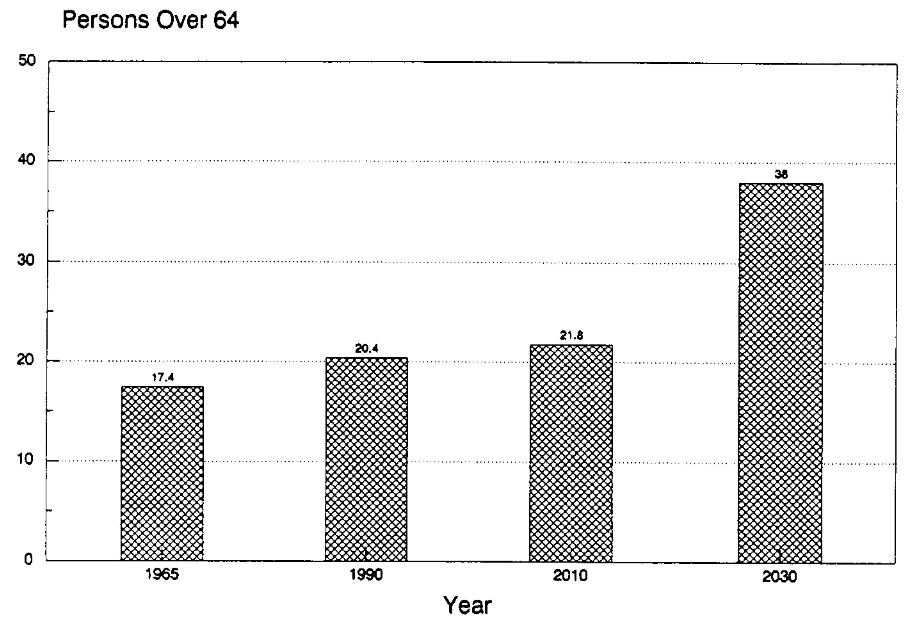


The aging of the baby boom will magnify the effects of the increase in average longevity as a growing number of people grow old enough to benefit from an increased lifespan. That effect will be further magnified by the decrease in the birth rate. As a larger percentage of the population grows older and retires, there will be a decreasing percentage of the population entering the workforce to take their place. Currently there are approximately 5 people aged 18 to 64 for every person aged 65 and over. By 2030, when the entire baby boom generation will be over age 65, there will only be about 2.5 people of working age for every person age 65 or over. **Figure 1.8** shows the number of persons over age 64 for every one hundred persons aged 18 to 64.

The decline in the number of working people contributing to Social Security and the state retirement funds for each retired person points up the importance of having a fully funded system. If the system is not fully funded by that time the enormous burden of paying retirement benefits to nearly one quarter of the population will fall squarely on the shoulders of the working men and women of the twenty-first century.

Figure 1.8

Persons Over Age 64 Per 100 Persons Age 18 to 64



The aging of the working population also point up the need to adjust jobs to the needs and preferences of older workers if a labor shortage is to be avoided. The median age is projected to continue its upward climb into the next century with no sign of a decline in sight. Older workers will become an increasingly important part of the human resource puzzle. Adjustments that could entice older workers to remain in the workforce might include partial retirement, job sharing, or post retirement employment.

III. CONCLUSION

A discussion of retirement age policy needs to be based upon a knowledge of the fundamental demographic shifts that are going to take place over the next forty years. Increasing longevity, the aging of the baby boom, and the decline in births will combine to produce a "senior boom" of gigantic proportions. The shift in population is going to result in challenges to the state retirement systems , as well as to the state as an employer, challenges that have to be met as Washington enters the twenty-first century.

Appendix C

Chronological Development of Retirement Eligibility Requirements for Uniformed Personnel, Teachers and Other Public Employees

Plan I

First Class City Police Retirement Systems
Retirement Eligibility and Normal Benefit

Year	Age	Years of Service	Normal Retirement Benefit	Duty Disability
1909	60	20	50% of Salary	50% of Salary
1915	60 Any	20 25 or More	50% of Salary	Same
1937	Any	25 or More	50% of Salary (Maximum $125/Month)	Same
1955	Any	25 or More	45% of Salary Plus 1% for each year of service to a maxi- mum benefit of 50%	Same
1957	Any	25 or More	Same as 1955 except salary cannot exceed that attached to rank of Captain	Same
1959	Any	25 or More	50% of Salary not greater than that attached to position of Captain	Same
1961	Any	25 or More	50% of Salary at any time thereafter not to exceed 50% of salary attached to position of Captain	Same
1969 (Capped)	Any	25	Same as 1961 except benefit increased by 2% for each full year of service above 25 years but not exceeding 30 years	Same
1969 (LEOFF)	50 60 (Mandatory) 50 (Vested Terminated)	25 5 5	2% of final salary	Same
1970	50 60 (Mandatory)	5 5	Service X final salary X 1%, if service less than 10 years; 1.5%, if 10-19 years; or 2% if 20 or more years	Same

Fire Fighters Relief and Pension Retirement Systems Retirement Eligibility and Normal Benefit

Year	Age	Service	Normal Retirement Benefit	Duty Disability
1909	55	20 or More, with 2 years served immediately prior to retirement	50% of Salary	50% of Salary
1919	55	20 or More, with 10 years served immediately prior to retirement	50% of Salary	Same
1929	55	20 Years or More	50% of Salary	Same
1935	55 Any	20 Years or More 25 Years	50% of Salary attached to rank held, not to exceed $125/month	Same
1947	55	25 or More	Average 5 year salary X service X factor ranging from 1.5% to 2.0%, based on entry age, but not to exceed $125/ month	Same
1957	55	25 or More	Same as 1947 except maximum benefit revised to $150/month	Same
1967	55	25 or More	Same as 1957 except maximum benefit removed	Same
1969 (Capped)				
1969 (LEOFF)	50 60 (Mandatory) 50 (Vested Terminated)	25 5 5	2% of final salary	Same
1970	50 60 (Mandatory)	5 5	Service X final salary X 1%, if service less than 10 years; 1.5% if service 10-19 years; 2% if 20 or more years	Same

Teachers Retirement System
Retirement Eligibility and Normal Benefit

Year	Age	Service	Annuity	Normal Retirement Benefit
1917 (1st Class School District Systems)	Any	30 years (240 months) in teaching, with 15 years in the state	$420/yearly	None
1923 (State system for other districts)	Any	30 years (240 months), in teaching, with 15 years in the state	$420/yr	None
1931 (State System)	Any	Same as 1923 except 20 years teaching must be in the state	$420/year	None
1938 (1917 and 1923 systems capped)	60 60 Any	30 5 30	Yes for all but may withdraw	$40/month X/30ths of $20/month (X=service) Reduction from age 60
1947	60 Any 60	30 30 5	Same	$100/month $100/mo less $2/year under age 60 X/30ths of $100/month
1955	Any 60	30 5	Same	$4/month/year service, not to exceed 35 years $4/month/year service
1963	Any 60	30 5	Same	Annual avg of 5 years salary in last 10 years X service X 0.833%
1970	Any 60	30 5	Same	$100/year plus annual avg of 2 years salary X service X 1%
1972	Any 60 55	30 5 25	Same	Same as 1970
1973	Same	Same	No	Annual avg of 2 years salary X service X 2% (May withdraw any employee contribution)

Public Employees Retirement Systems
Retirement Eligibility and Normal Benefit

Year	Age	Service	Normal Retirement Benefit
1947	65 Mandatory (Waivable) 60 Any	Any 10 Years 35	Pension of 5 years average salary X 0.714% X Service to 35 years plus Annuity plus $100/Year
1949	70 Mandatory (Waivable) 60 Any	Any 10 Years 35	Same as 1947
1951	70 Mandatory (Waivable) 60 Any	Any 5 Years 35	Same as 1947
1953	70 Mandatory (Waivable) 60 Any	Any 5 Years 30	Same as 1947
1961	Same as 1953	Same as 1953	Pension of 5 Year average salary X 0.833% X Service plus Annuity plus $100/year
1969	Same as 1953	Same as 1953	Pension of 2 Year average salary X 1% X Service plus Annuity plus $100/year
1971	70 Mandatory (Waivable) 60 55 Any	Any 5 25 30	Same as 1969
1972	Same as 1971	Same as 1971	2 Year average salary X 2% X years service up to 30 years
1977	Same as 1972	Same as 1972	Same as 1972
1982	mandatory age removed	Same as 1971	Same as 1972

Appendix D

1991 Retirement Age Surveys for Active Members

1991 Retirement Age Survey Methodology

Purpose

- To gather primary data on why Washington state public employees retire when they do.
- To gather employee perceptions regarding retirement age issues in general and Plan II benefits in particular.
- To measure Plan II members' reactions to retirement benefit options.

Methodology

- The survey process began in February with development of four separate survey questionnaires, for four survey groups:

  PERS & TRS Plan I Active Members, within 5 years of retirement
  PERS & TRS Plan I Retired Members, eligible to retire
  at age 55, w/25-30 years of service.
  PERS & TRS Plan II Active Members
  LEOFF Plan II Active Members

- 600 subjects randomly selected for each PERS & TRS survey. 300 for the LEOFF II survey. Subjects included current and retired members from all types of covered public employment:

  The state
  Counties
  Cities
  School districts
  Special districts

- Surveys for each group were mailed one to two weeks apart to facilitate data entry and analysis.
- Response rates:

  Over 60 % for the Plan I surveys
  45% for the PERS and TRS Plan II surveys
  Over 50% for the LEOFF II surveys

Active Member Survey Results

Plan II - Active Member Survey

Do you think you will retire from the Plan II system?

	Yes	No	Not Sure
Non-School District PERS	60%	12%	28%
School District PERS	55%	12%	33%
TRS	46%	9%	45%
LEOFF	36%	39%	25%

In general, do you consider yourself satisfied or dissatisfied with your PERS II retirement benefits?

	Satisfied	Dissatisfied	Not Sure
Non-School District PERS	12%	52%	36%
School District PERS	17%	45%	38%
TRS	2%	75%	23%

If you had been allowed not to join the Plan II system when you first were hired, would you have chosen not to join?

	Not Join	Join	Not Sure
Non-School District PERS	21%	41%	38%
School District PERS	28%	51%	21%
TRS	35%	22%	43%
LEOFF	34%	32%	34%

If you had the option to leave the system now (with a full refund of your contributions and interest), would you do so?

	Leave	Stay	Not Sure
Non-School District PERS	22%	50%	28%
School District PERS	21%	51%	28%
TRS	25%	37%	38%
LEOFF	36%	28%	36%

Do you feel you could provide yourself with a better retirement income through a different means of savings or investment?

	Yes	No	Not Sure
Non-School District PERS	44%	19%	37%
School District PERS	34%	30%	36%
TRS	51%	9%	40%
LEOFF	60%	7%	33%

Plan II LEOFF - Active Member Survey

At what age do you anticipate you will no longer be able to perform the physical duties of law enforcement or fire fighting?

Age	Percent
Before age 45	2%
Between age 45 & 49	20%
Between age 50 & 54	57%
Between age 55 & 58	11%
After age 58	10%

What area of your employee benefits are you most concerned about?

LEOFF II Benefits	Rank
Duty Disability	1
Service Retirement	2
Non-duty Disability	3
Post-Retirement Health Care	4
Health Care	5

LEOFF II Active Members

	Yes	No	Not Sure
If a new retirement plan was created that allowed for retirement at age-53, but required an increase in the employee contribution rate of up to 2.1% (to a total of 9.7%), would you switch to the new plan?	63%	12%	25%
If a new retirement plan were created that allowed for retirement at age-50, but required an increase in the employee contribution rate of up to 3.5% (to a total of 11.1%), would you switch to the new plan?	50%	15%	35%
Would you like to have the option of being able to transfer to non-police or non-fire duties and receive a retirement benefit at age-58 that is based on your LEOFF salary, which has been increased to reflect inflation?	52%	17%	31%
Would you like to have the option to receive an actuarially increased benefit for delaying receipt of your retirement benefit beyond age-58?	40%	34%	26%
Suppose an option were created which would allow you to retire for up to two years and receive monthly benefits while you return to school or undertake training for a second career. At the end of this period, your benefit would be suspended until age-58. When your monthly benefits resumed, they would be recalculated to account for any additional service earned, and the amount of money already received during the retraining period. Would you like to have an option as described above?	53%	28%	19%

PERS II & TRS II Active Membership

If a new retirement plan were created that allowed for retirement at age-60, but required an increase in the employee contribution rate of approximately 2.0% for PERS II or 2.4% for TRS II (to a total of 6.7% for PERS II and 9.1% for TRS II) would you switch to the new plan?

	Yes	No	Not Sure
Non-School District	69%	9%	22%
School District	69%	14%	17%
Teacher	68%	12%	20%

If a new retirement were created that allowed for retirement at age-55, but required an increase in the employee contribution rate of up to 3.0% for PERS II or 3.75% for TRS II, (to al total of 7.7% for PERS II or 10.45% for TRS II) would you switch to the new plan?

	Yes	No	Not Sure
Non-School District	55%	27%	18%
School District	44%	28%	28%
Teacher	56%	17%	27%

Results of the 1991 Retirement Age Survey For Employee Organizations

Responding Organizations

Association of Washington School Principals
Fisheries Patrol Sergeants Association
International Federation of Professional and Technical Engineers, Local 17
Public School Employees of Washington
Service Employees International Union, Local 1199
Teachers' Association - School for the Blind
Washington Education Association*
Washington Federation of State Employees*
Washington Joint Council of Stationary Engineers
Washington State Council of County and City Employees
Washington State Council of Firefighters
Washington State Council of Police Officers
Washington State Law Enforcement Association
Washington State Nurses Association
Washington State Patrol Troopers Association

Non-Responding Organizations (as of August 8, 1991)

Commercial Vehicle Enforcement Officer's Association
International Brotherhood of Electrical Workers, #76
National Union of Hospital and Health Care Employees AFL-CIO
Teachers' Association - School for the Deaf
United Food and Commercial Workers, International Union, Local 1001
Washington Public Employees Association*
Washington State Corrections Employees Association

* Responded to December 1990 letter requesting suggestions for survey.

Results of the 1991 Retirement Age Survey For Employee Organizations

The following questionnaire asks for your organization's view on issues that relate to public employee retirement benefits. **Keep in mind that there may be costs associated with your organization's preference. Assume for the purposes of this questionnaire, that these increased costs would be paid equally by the employer and employee.**

1. The state's retirement plan should allow public employees to receive a retirement benefit:

- At whatever age the employee chooses to leave public employment.

  Fisheries Patrol Sergeants Association
  Public School Employees

- After a certain number of years of service. After _____ years.

Federation of State Employees -	20 Yrs.
Joint Council of Stationary Engineers -	20 Yrs.
Professional & Technical Engineers, Local 17 -	25 Yrs.
Service Employees, Local 1199 -	20 Yrs.
State Law Enforcement Association -	25 Yrs.
State Patrol Troopers Association -	25 Yrs.
Teacher's Association -	30 Yrs.
Washington School Principals -	----

- At an age when most employees permanently leave the workforce due to age (e.g. age-65).

State Council of Firefighters -	Age 50

- Other/ Comments

State Nurses Association	Either 20 years or Age 55.
Washington Education Association -	Combination of age and service credit.
State Council of Police Officers -	Age 50 after 20 years.
State Law Enforcement Association -	Age 50 after 20 years.

2. Should public employees be forced to join a state retirement system?

- Yes

  Federation of State Employees
  Joint Council of Stationary Engineers
  Professional & Technical Engineers, Local 17
  Public School Employees
  State Council of Police Officers
  State Patrol Troopers Association
  State Law Enforcement Association
  Teacher's Association - WSSB
  Washington Education Association
  Washington School Principals

- No

  Service Employees, Local 1199
  State Nurses Association - Or not forced to contribute.

- Not sure

  Fisheries Patrol Sergeants Association
  State Council of Firefighters

3. Pensions are a part of an employee's compensation which the employer pays at a later date. Which of the following statements most closely represents your organization's view?

- The state should be paternalistic, and pay retirement benefits only in the form of a monthly allowance for life, so as to insure that career employees have adequate income for the full duration of their retirement.

  Joint Council of Stationary Engineers
  State Council of Police Officers
  Professional & Technical Engineers, Local 17
  Public School Employees
  State Patrol Troopers Association
  Teacher's Association

- The state should not be paternalistic, but instead should pay retirement benefits in whatever form requested by the retiree (e.g. lump sum cash-out). The state should do this even if it allows retirees to make choices they may later regret.

  Fisheries Patrol Sergeants Association
  Service Employees, Local 1199
  State Nurses Association
  Washington Education Association
  Washington School Principals

- Other/ Comments

  Federation of State Employees - Benefit payout structure should provide numerous options, including cashout.
  State Council of Firefighters - Allow lump sum cashout or other options.
  State Law Enforcement Association - Current Policy.
  Washington School Principals - Flexibility would eventually force less dependence on paternalism.

4. A career employee should:

- Not be responsible for adding any amount of income to their retirement other than the contributions they have made to their Plan II retirement benefit and Social Security.

  Fisheries Patrol Sergeants Association
  Professional & Technical Engineers, Local 17
  Public School Employees
  Service Employees, Local 1199
  State Council of Firefighters
  State Law Enforcement Association
  State Patrol Troopers Association
  Teacher's Association - WSSB

- Be responsible for providing a small amount of income to their retirement, from either savings or investment earnings.

  Joint Council of Stationary Engineers
  State Council of Police Officers
  State Nurses Association
  Washington School Principals

- Be responsible for providing one third of their retirement income from either savings or investment earnings.

- Other/ Comments

  Federation of State Employees - Participate financially during their active years.
  Washington Education Association - Employee should be responsible for some additional sources of revenue, but we are unable to quantify exact amount.
  Washington School Principals - But the small amount should consist of disposable, not living expense dollars.

5. Public employees, including police, firefighters, teachers, etc. should all have:(Please check only one.)

- The same retirement benefits.

  Professional & Technical Engineers, Local 17
  Public School Employees
  Service Employees, Local 1199
  State Nurses Association
  Teacher's Association - WSSB
  Washington Education Association

- Different benefits based on the type of work different employees perform.

  Fisheries Patrol Sergeants Association
  Joint Council of Stationary Engineers
  State Council of Firefighters
  State Council of Police Officers
  State Law Enforcement Association
  State Patrol Troopers Association
  Washington School Principals

- Neither

- Other/ Comments

  Federation of State Employees - Benefits should be comparable among all systems with early retirement for high stress occupational categories built into each system.
  Washington School Principals - The systems should encourage longevity through incentives, but allow for earlier retirement where necessary.

6. Public employees, including police, fire fighters, teachers, etc. should have a choice of benefits based on the amount of contributions:

- Employees are willing to pay.

  Fisheries Patrol Sergeants Association

Joint Council of Stationary Engineers
Public School Employees
State Council of Police Officers
State Patrol Troopers Association
State Nurses Association
Washington Education Association
Washington School Principals

- Employers are willing pay.

  Public School Employees
  State Council of Firefighters
  State Patrol Troopers Association
  State Nurses Association
  Teacher's Association - WSSB
  Washington School Principals

- Neither

  Federation of State Employees

- Question not clear

  Service Employees, Local 1199
  State Law Enforcement Association
  Professional & Technical Engineers, Local 17

7. As a matter of policy, should employers have the option to select between several plans with different retirement ages and contribution rates?

- Yes

  Fisheries Patrol Sergeants Association
  Teacher's Association - WSSB

- No

  Federation of State Employees
  Joint Council of Stationary Engineers
  Professional & Technical Engineers, Local 17
  Public School Employees
  Service Employees, Local 1199
  State Council of Firefighters
  State Council of Police Officers
  State Law Enforcement Association
  State Nurses Association
  State Patrol Troopers Association
  Washington Education Association

- Not Sure

  Washington School Principals

8. As a matter of policy, should <u>employees</u> have the option to select between several plans with different retirement ages and contribution rates?

- <u>Yes</u>

  Fisheries Patrol Sergeants Association
  Professional & Technical Engineers, Local 17
  Public School Employees
  Service Employees, Local 1199
  State Council of Police Officers
  State Nurses Association
  State Patrol Troopers Association
  Teacher's Association - WSSB
  Washington Education Association
  Washington School Principals

- <u>No</u>

  Federation of State Employees
  Joint Council of Stationary Engineers
  State Law Enforcement Association - Would increase administrative costs.

- <u>Not sure</u>

  State Council of Firefighters

9. All current state retirement plans are of the defined benefit type. Should the state, as a <u>substitute</u> to it's current plans, provide one or more of the following?

- <u>A new or amended defined benefit retirement plan.</u>

  Professional & Technical Engineers, Local 17
  State Council of Police Officers

- <u>A defined contribution retirement plan.</u>

- <u>A combined defined benefit and defined contribution retirement plan.</u>

  State Patrol Troopers Association
  Teacher's Association - WSSB
  Washington School Principals

- <u>None of the above.</u>

  Federation of State Employees
  Joint Council of Stationary Engineers
  Public School Employees
  Service Employees, Local 1199
  State Law Enforcement Association - One good plan would seem better than several "options".

- <u>Comments</u>

  Fisheries Patrol Sergeants Association - Unsure. Favor transfer opportunity from PERS to LEOFF.

State Council of Firefighters - Need more information.
State Nurses Association - Not enough information.
Washington School Principals - The defined benefit portion should comprise the base. Creative ways of separating out an additional defined contribution amount need to be explored.
Washington Education Association - Plan III could be created which offers a combination of a defined benefit and defined contribution model. This would allow a member to withdraw an annuity and still be assured of a monthly pension.

10. What policies should underlie changes made to the Plan II retirement benefits?

Fisheries patrol Sergeants Association - Consideration and equity for the various classes of state employees. Some jobs are more strenuous and hazardous than others. These classes should be allowed to retire earlier, even if it means a higher contribution rate.

Joint Council of Stationary Engineers - Employees can't be expected to work to 65 regardless of years of service. Current Plan II benefit reductions are unrealistic.

Professional & Technical Engineers, Local 17 - A policy of developing a retirement system which will aid in the retention of qualified employees in a governmental employment arena which will be otherwise hurt competitively by continuing revenue problems into the foreseeable future.

Public School Employees - Enhancement of retirement benefits for part-time employees.

State Council of Firefighters - Polices should concern only providing adequate funding for changes in benefits. Policy changed in past LEOFF retirement issues should not be a matter of policy by the state.

State Council of Police Officers - Retirement at age-50. Final average salary to 24 months, instead of 60 months. Duty-related disability (totally incapacitated) should be 2% per year without actuarial reduction. Duty-related death benefit should 50% of final average salary, payable to surviving spouse, increase by 5% for each eligible child.

State Patrol Troopers Association - LEOFF II is not realistic for the type of work performed, age 58 is too old and most departments do not have enough desk jobs for their older (low ranking) officers. Law Enforcement & Firefighter retirement systems should be service-based.

State Law Enforcement Association - Retirement age, actuarial reduction, contribution rate, benefit received, eligibility to receive benefit.

Washington Education Association - The age in Plan II is too old for educators in TRS II and PERS Plan II. While some Plan II people will voluntarily choose to work till age-65, to require all members, regardless of their emotional, physical or psychological condition assumes an impossible situation. Withdrawal of annuity should be allowed for Plan II.

Washington School Principals - Reduce penalty for retirement prior to 65; current rate of reduction is punitive (2% per year more reasonable). COLA eligibility maintained at age 65. Somehow those people cannot and should not continue to be in the classroom (TRS II) need to have a more reasonable escape path.

11. Does your organization believe that more resources of the plan should be allocated to providing benefits to employees who leave covered employment prior to qualifying for normal retirement?

- Yes

Joint Council of Stationary Engineers

Professional & Technical Engineers, Local 17 - Public employees will not accrue the workforce stability inherent in PERS I until PERS II goes to a 25- or 30-year retirement plan.

Public School Employees - Many part-time employees desire to leave the workforce when their spouses do. They should not be penalized for exercising such an option.

Service Employees, Local 1199

State Law Enforcement Association - Normal retirement for LEOFF II should be changed to 50 years of age with 20 years covered service or any age with 25 years covered service.

State Nurses Association

State Patrol Troopers Association - Members of LEOFF II should have the ability to move into another less hazardous occupation without loss of benefits. If LEOFF II must remain age based the employee should be given an option for the last 8 to 10 years prior to retirement which does not entail physically dangerous work. The current LEOFF II system requires an old man to perform a young man's job or face the prospect of drastic cuts in retirement benefits.

Washington Education Association - Need flexibility to draw pension (retire) before age-65. Consider 'rule of 85' concept (combined age at retirement plus years of service credit.) Consider reduced actuarial table for drawing pension before age-65. Consider a plan which allows for a phased retirement with pension income.

Washington School Principals - TRS I members entered the profession with the understanding that 30 years constituted a career. The age at entry is irrelevant. Some provisions need to be made for those retirees currently caught in health care and inflation crunch of recent years. Younger active Plan I members need encouragement and incentive to both remain in active service longer and to co-contribute, while working, toward post-retirement COLA.

- No

Federation of State Employees - Normal retirement ages should be reduced for all high stress occupational categories as age 60 or 65, normal retirement, is not realistic for many employees.

State Council of Firefighters - We are not interested in decreasing benefits for normal retirement, but would support funding improved benefits for other than normal retirement through contributions by all parties.

State Council of Police Officers - Provided that normal retirement age for Plan II police and fire is defined as age-50. The current 2% per year formula is fair, providing it can be collected without actuarial reduction at age-50.

- Not sure

Fisheries Patrol Sergeants Association - It seems unfair, both career state employees have worked 30 years, yet one receives a reduced benefit because he's retired at a younger age. Somehow that doesn't appear to be just. I relate question one and ten together concerning the age at which a person elects to retire.

Appendix E

Washington Public Employees Covered by Social Security

Summary Table of Public Employees Covered by Social Security, 1991

Source: Washington City & County Employee Salary and Benefit Survey for 1991, Data collected by the Washington Local Government Personnel Institute, Association of Washington Cities in cooperation with Washington State Association of Counties, Olympia, WA.

	General Employees			Law Enforcement			Fire Fighters		
Cities	**Social Security**	**Altrn***	**None**	**Social Security**	**Altrn***	**None**	**Social Security**	**Altrn***	**None**
Over 50,000	6	2	0	1	3	3	1	3	3
15,001 - 50,000	21	6	0	14	6	5	4	7	12
5,001 - 15,000	35	1	1	33	3	1	13	3	5
2,001 - 5,000	38	2	0	36	2	0	6	1	0
501 - 2,000	72	1	0	46	1	0	**	**	**
Less than 500	27	0	1	8	0	2	**	**	**
Counties	39	0	0	38	0	1	**	**	**

* Social Security alternative plan.
** Not usually employed by these jurisdictions.

Local Employees Covered by Social Security, By Employee Type

Source: Washington City & County Employee Salary and Benefit Survey for 1991, Data collected by the Washington Local Government Personnel Institute, Association of Washington Cities in cooperation with Washington State Association of Counties, Olympia, WA.

Y = Social Security A = Alternative N = No Coverage -- = Not Applicable

Participants	**General Employees**	**Law Enforcement**	**Fire Fighters**
Cities Over 50,000			
Bellevue	A	A	A
Bellingham	Y	N	N
Everett	Y	N	N
Federal Way	A	--	--
Seattle	Y	A	A
Spokane	Y	Y	Y
Tacoma	Y	A	A
Yakima	Y	N	N

Y = Social Security A = Alternative N = No Coverage -- = Not Applicable

Participant	**General Employees**	**Law Enforcement**	**Fire Fighters**
Cities 15,001-50,000			
Aberdeen	Y	N	--
Auburn	Y	Y	N
Bremerton	Y	N	N
Des Moines	A	A	--
Edmonds	A	A	A
Kennewick	Y	Y	N
Kent	Y	A	A
Kirkland	A	A	A
Lacey	Y	Y	--
Longview	Y	Y	N
Lynnwood	Y	Y	N
Mercer Island	Y	Y	N
Mount Vernon	Y	Y	Y
Mountlake Terrace	A	A	A

Participant	General Employees	Law Enforcement	Fire Fighters

Y = Social Security A = Alternative N = No Coverage -- = Not Applicable

Oak Harbor	Y	Y	Y
Olympia	Y	Y	Y
Pasco	Y	Y	A
Port Angeles	Y	N	N
Pullman	Y	Y	N
Puyallup	Y	Y	Y
Redmond	A	A	A
Renton	Y	Y	N
Richland	Y	N	N
SeaTac	A	--	A
Vancouver	Y	N	N
Walla Walla	Y	N	N
Wenatchee	Y	Y	--

Participant	General Employees	Law Enforcement	Fire Fighters

Y = Social Security A = Alternative N = No Coverage -- = Not Applicable

Cities 5,001 - 15,000			
Anacortes	Y	Y	N
Bonney Lake	Y	Y	Y
Bothell	Y	Y	N
Brier	Y	Y	--
Camas	Y	Y	--
Centralia	Y	N	--
Chehalis	Y	Y	N
Cheney	Y	Y	Y
Clarkston	Y	Y	Y
College Place	Y	Y	--
Ellensburg	Y	Y	Y
Enumclaw	Y	Y	Y
Ephrata	Y	Y	Y
Ferndale	Y	Y	--
Fircrest	Y	Y	--
Grandview	Y	Y	--
Hoquiam	Y	A	A
Issaquah	Y	Y	Y
Kelso	Y	Y	--
Lynden	Y	Y	--
Marysville	Y	Y	Y

Participant	General Employees	Law Enforcement	Fire Fighters

Y = Social Security A = Alternative N = No Coverage -- = Not Applicable

Mill Creek	N	A	--
Moses Lake	Y	Y	--
Mukilteo	Y	Y	--
Normandy Park	Y	Y	--
Port Orchard	Y	Y	Y
Poulsbo	Y	Y	Y
Sedro-Wooley	Y	Y	--
Selah	Y	Y	Y
Shelton	A	A	A
Snohomish	Y	Y	--
Steilacoom	Y	Y	Y
Sumner	Y	Y	Y
Sunnyside	Y	Y	N
Toppenish	Y	Y	N
Tukwila	Y	Y	Y
Tumwater	Y	Y	A

Appendix F

Washington Retirement System Employer Interviews

Employer Interview Methodology

To collect employers' viewpoints on retirement age issues, Dr. Robert Hollister, retired director of the Dept. of Retirement Systems conducted one-on-one interviews with the heads of 30 different public agencies. (For a complete list of those interviewed, see the next page.) Agency directors, school district superintendents and police and fire chiefs were chosen as the target of these interviews because it was felt they would present a viewpoint that balanced their agency's fiscal concerns against personnel policy issues.

The interview method of information-gathering was used to provide respondents with a relatively easy way to answer open-ended questions. It also allowed Dr. Hollister to pursue areas of specific concern to certain employer groups, i.e. duty-disability for LEOFF employers.

To obtain a broad representation of public employers, an effort was made to select individuals who headed both large and small agencies. Consideration was also given to whether the organization was based in a rural or urban setting and in eastern or western Washington.

Summary of Employer Interviews

PERS:

3 City Officials
1 Administrator for the Developmentally Disabled
2 County Officials
1 Hospital Administrator
3 Corrections Officers

TRS:

4 Superintendents
1 Former Superintendent of
Public Instruction and Community College President
2 Principals

LEOFF:

3 Fire Chiefs
3 Police Chiefs
1 Chief WSP

CITY:

1 Pension Administrator
1 Risk Manager
1 Utility Union Representative

UNIVERSITY:

1 Professor of Environmental Health

PRIVATE SECTOR:

2 Pension Administrators

Summary of Employer Interviews

LEOFF II

3 Fire Chiefs
3 Police Chiefs
1 Chief Washington State Patrol

Lakewood Fire Department:	38 Plan II;	26 Plan I
Tacoma Police Department:	204 Plan II;	134 Plan I
Seattle Police Department:	681 Plan II;	553 Plan I
Tacoma Fire Department:	Plan I and II about equal	
Seattle Fire Department:	418 Plan II;	555 Plan I

RECRUITMENT

Without exception, every LEOFF employer believed that the retirement plan had absolutely no bearing on recruitment. No employer indicated any problem attracting qualified applicants.

RETENTION

None believed that Plan II would serve to hold people in service. One Chief expressed the belief that Plan II works against considering the fire service as a career. One Chief felt that wages and other fringe benefits were the key to holding personnel in the department and that retirement played a minor role.

PERSONNEL

Some Chiefs felt that Plan I provided a mechanism to ease out less than productive employees although one Chief strongly denied that any such practice was ever used. Interestingly, his department historically has a very large percentage of Plan I disability retirements.

STRESS and BURN-OUT

The Police Chiefs uniformly felt that burn-out was a relatively minor problem which could be handled by other personnel actions rather than retirement.

The Fire Chiefs uniformly felt that true burn-out was seldom seen except in the positions of the para-medics. Depending on how the various departments had set up their para-medics, they felt that they were able to deal with the problem.

None of the Chiefs felt burn-out was a function of either age or length of service but that it was linked only to specific duties.

TRANSITION

All of the Chiefs liked the idea of a program that would transition employees out of Public Safety. One Chief expressed the view that all new employees should be counseled not to plan on Public Safety as a life-time career and that they should begin training early on for something else.

PHASED RETIREMENT and JOB SHARING

Phased retirement and job sharing was a mixed bag. Opinions were about equally divided. Those against it most commonly referred to the need to pay a dual set of fringe benefits.

DUTY DISABILITY

Two aspects of disability were of major concern: Belief that employees were not well covered for duty disabilities under Labor and Industries Workers Compensation and lack of limited duty positions caused by "civilianization."

The progressive "civilianization" of jobs formerly used for light duty assignment.

All elements of Public Safety are seeing an increasing pattern of entry at higher ages as a result of the court decisions on age discrimination.

TRS II

4 Superintendents
1 Former Superintendent of
Public Instruction & Community College President
2 Principals

It does not appear that the employers have given a great deal of thought to the provisions of Plan II.

BURN-OUT and STRESS

The subject of burn-out drew a wide variety of opinions. One employer didn't believe there was such a thing. Some felt that, to the extent it did occur, it could be handled through the personnel system. Another said it would indicate a need to counsel them out of the system. One believed it was most likely to occur in the mid to late career and more likely in men than women.

Another indicated that they had a four day release program but would like to give a year off with half-pay. One district provides sabbaticals at 1/3 pay with a quota of 3 teachers and 1 administrator per year, but the superintendent felt the program was under-utilized. He felt that burn-out is more likely seen in the first 10 years.

TRANSITION

All but one were strongly in favor of a program to transition teachers to other employment.

All employers indicated that they were seeing an increasing number of people entering teaching from other fields at an older age.

PHASED RETIREMENT

All employers supported the idea of phased retirement, although one expressed a concern that it might pose a problem in a small district.

PERS II

3 City Officials
1 Administrator-School for the Developmentally Disabled
2 County Officials
1 Hospital Administrator
3 Corrections Officials

RECRUITMENT

Uniformly, all employers expressed the belief that the retirement system had no impact on recruitment.

RETENTION

They did not feel it retained employees until they were nearing retirement age.

PERSONNEL

Several of them expressed a desire for more flexibility in awarding early retirement without major penalty, but did not want it if it entailed significant additional cost. When presented with a hypothetical situation in which they received a windfall of major funding and how they would apply it in priority, the first category selected was a salary increase, second was increased health benefits, and retirement enhancements were either very low or last.

Corrections, Hospital and Developmentally Disabled Employers

All these institutions had extremely high turn-over rates ranging from 20 to 30% per year. Retirement provisions seemed to be relatively minor concern.

RECRUITMENT

With the exception of certain professional specialties, none of them were experiencing recruiting problems.

PERSONNEL

None of them felt normal retirement at 65 was any particular problem.

PHASED RETIREMENT

They felt employer optional phased retirement/job sharing would work.

BURN-OUT and STRESS

All were of accord that if it did exist it was a personnel and not a retirement problem. Without exception, employers do not see it related to either age, length of service or gender. They felt sabbaticals could be a good tool but uniformly believed that it should be an employer option.

TRANSITION

All employers felt a retirement supported transition program would be a valuable personnel tool to those employees who wished to take advantage of it.

Local Government Employers

Except as noted, this group responded identically to the institutional employers.

Local employers, particularly those with LEOFF II members and those located near cities with their own retirement systems, favored portability between PERS, LEOFF II and city systems.

Although they had relatively low turn-over rates, they were only minimally concerned about the normal retirement age. Those with LEOFF II members were more concerned about duty disabilities, but were only minimally informed as to Labor and Industries benefits.

Appendix G

Workforce 2000: The Retirement Benefit

Produced by the Department of Retirement Systems, July 1991

The Retirement Benefit

Examining the Public Employees' Retirement System as a part of a total benefit package to aid Washington State Government in meeting its human resource needs as we approach the year 2000 and beyond.

July 1991

Department of Retirement Systems

Public Employees • Teachers • Law Enforcement Officers and Firefighters • State Patrol • Judges • Judicial

EXECUTIVE SUMMARY

The age of Washington's population is steadily increasing and projected to continue to increase into the next century. The state workforce is older than both Washington residents and the U.S. workforce and population. An estimated 33.5% of the state workforce will be eligible to retire between 1991 and 2000. Specific occupational classes experiencing the highest percentage of retirements include experienced and upper level management employees. The projected number of retirements, particularly when added to the number of persons who will leave State government prior to retirement, highlight the importance of recruitment and retention of State employees.

The compensation package offered by the State, of which the retirement benefit is a part, plays an important role in attracting and retaining employees. This report highlights the following effects of the retirement benefit on the recruitment and retention of State employees:

- The Public Employees' Retirement Systems (PERS) benefit has a limited effect on the recruitment of employees.
- The retirement system provides an incentive for employees to remain in state service. This retention incentive has a limited effect in the earlier phases of the employee's career. As the employee remains with the state over a longer period of time, the retirement system exerts a stronger retention effect. The incentive to remain in state employment is reduced once retirement eligibility is reached.
- An important shift in policy occurred in 1990 when the Legislature enabled post-retirement employment opportunities for Plan II retirees, recognizing that expertise possessed by retired workers can provide a significant benefit to the state.
- The ability to retain employees could have a significant effect on the workforce competitiveness of the State of Washington as it enters the next century.

HOW THE PUBLIC EMPLOYEES RETIREMENT SYSTEM WORKS FOR THE STATE AS AN EMPLOYER

INTRODUCTION

The government of the state of Washington is a service "business." Quality of service and agency productivity depend on the state's most valuable asset, its employees. The changing demographics of the workforce as we approach the year 2000 will present many challenges to the state as an employer attempting to meet its human resource needs.

Toward achieving the goal of meeting the state's human resource needs, this report considers the role the Public Employees Retirement System (PERS) has in recruiting and retaining state employees needed to carry out the programs and services provided by state government.

The foundation of this report is two changing workforce demographics studies documented in the Office of Financial Management (OFM) publications State Government And The Workforce Of The Future, July 1988, and Workforce 2000 Personnel System Study, by The Washington State Commission for Efficiency and Accountability in Government, March 1990.

In 1989, the Governor's Office requested a review of the state's personnel system and recommendations on how it could operate more effectively and efficiently. The result of that request was the Workforce 2000 Personnel System Study.

That report recognized that the citizens of the state of Washington entrust significant responsibilities to state government and that it is through its employees that state government upholds that trust. As the problems facing society and state government become continually more complex and the risks associated with solving them grow, the importance of attracting and retaining employees with the necessary skills and commitment to state government increases.

Workforce 2000 examines expected changes in the workforce, including the rising average age of state employees, increasing number of state employees eligible for retirement and the decreasing availability of entry level workers. In addressing changes in its workforce, the state, as an employer, should evaluate the effects of pension benefits on the recruitment and retention of state employees.

The Washington State Retirement Systems can provide a steady stream of income during a vested members retirement years. This report examines the effect that benefit has on the recruitment and retention of employees.

Seventy percent of Washington State employees are members of the Public Employees Retirement System (PERS). For this reason, this report will concentrate on the features and functions of PERS Plan I and Plan II.

I. RECRUITMENT

The provision of employee benefits is becoming a larger portion of a compensation package, currently 25% for state employees according to the Governors proposed 1991-93 Operating Budget, and those benefits are an important factor in an organization's competitiveness for employees.

According to a joint poll of American workers conducted by the Gallup Organization and the Employee Benefits Research Institute study (EBRI) dated July, 1991, "more than two-thirds of Americans (70 percent) consider employee benefits such as health insurance, pensions, vacation, child care, life insurance and sick leave "very important" when deciding whether to accept or reject a job offer." Although health benefits ranks as the most important benefit, the pension benefit is becoming increasingly important, ". . 35% of Americans said pension coverage is the second most important benefit, compared with 17% who listed pensions second in importance in 1990. Concern for adequate retirement income may explain why 39% of respondents said they would not accept a job that did not offer a pension plan."

The importance of benefits in general, including pensions, was underscored by a recent national poll by the EBRI that showed an individual given a choice between two identical jobs, only one of which offered benefits, respondents said they would require a median amount of $10,000 in additional annual pay to accept a job without benefits.

The national interest in benefits is shared by the workers of Washington State. A workforce 2000 survey done by Elway Research in January 1991, asked 245 non-state employees why they would consider working for Washington state government. Fifty percent of respondents identified benefits as being the most important factor when considering state employment and, of the benefits offered, the pension benefit was the second greatest enticement after health benefits.

Dallas Salisbury, the President of the EBRI stated, "Growth in the stated importance of pension benefits can be expected to increase in the decade ahead as baby boomers age and become more concerned about retirement income."

The importance of benefits was recognized in Benefits Quarterly in an article entitled "Using Employee Benefits To Gain A Competitive Advantage." The article states that providing benefits ". . . no doubt helps in attracting job applicants." This does not mean, however, that different levels of benefits will lead to different levels of recruitment incentive. It is the presence or absence of benefits, not the level offered, that exerts an effect on recruitment.

The fact that most employees are not faced with competing job offers allowing them to weigh differing benefit offerings; that benefits, while important, are not important enough to most employees to cause them to seek out the information necessary to make a comparison; and that many employees may not perceive benefit differences that do exist led to the article to conclude: "Overall, the potential influence of benefit programs on employees attraction and motivation seem to be slight. Employees are unlikely to be attracted to firms on the basis of the benefits they offer, unless all other considerations are equal."

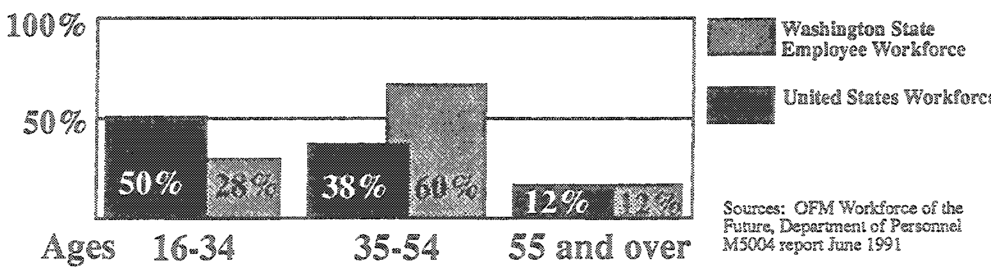
This conclusion is supported by a July 1991 Office of the State Actuary survey of state employers that describes common reactions regarding retirement benefits as a recruitment tool stating, "Retirement benefits have no impact on recruitment." However, as the population shifts to an older labor force toward a "sellers market", perceptions may change. With multiple job offers, benefits may become more important in order for an employer to remain competitive in attracting employees. While retirement benefits do not serve much of a recruitment function in the present environment, those benefits are an aid in retaining employees.

II. RETENTION

Although the value of retaining older employees will vary with the individual, in general retaining employees will become more important as the population ages and fewer entry level employees enter the workforce. The 1990 U.S. Census Bureau Statistics show Washington's population is growing older. The census found people ages 25 to 44 made up 34 percent of Washington's population. Two decades ago, this age group accounted for only 24 percent. Not only is Washington growing older, but the state government workforce is older still.

"The state government workforce has been considerably older as a group than the total (public and private) workforce since at least the mid 1970's", according to the OFM Workforce of the Future report. By 1985 the state Personnel Board workforce was actually older than the general workforce will be in the year 2000."

Workforce Distribution by Age: ***State Employees/Total Workforce***



Sources: OFM Workforce of the Future, Department of Personnel M5004 report June 1991

As of July 1991, 33.5% of the current state workforce, or approximately 19,700 of state employees, will be eligible to retire between 1991 and the year 2000. As the state workforce grows older the increasing frequency of retirements will affect some occupational classes more than others.

The job classes which stand to lose the largest percentage of current employees are once that involve the collection and disposition of billions of dollars of public and private assets, capital, physical plant and natural resources. Most of the classes require specialized training, technical expertise and experience, much of which must be obtained on the job. See Appendix A for a detailed table of expected retirements in job classes. Retention of those employees is clearly an important human resource goal for the state. In examining retention, it is important to differentiate between PERS Plan I and PERS Plan II.

A. PLAN I

PERS Plan I members are eligible to retire as follows: Age 60 with five or more years of service, age 55 with 25 or more years of service, and after 30 years of service at any age. Plan I has a maximum pension benefit cap of 60% of average final compensation.

Retirement eligibility, then, is a function of both age and years of service. If a member has not accumulated much state service and/or is a number of years away from retirement age, the PERS benefit may provide limited retention incentive. However, as employees approach retirement eligibility, the retention effect of the retirement benefit increases. Responses from employers surveyed in 1991 by the Office of the State Actuary supports that there is a widely held perception that a retirement benefit helps retain employees who are nearing retirement. However, the retention effect of PERS Plan I, which covers 55% of the state's workforce, can be quite different from that of PERS Plan II.

As a Plan I member approaches retirement age, the retirement benefit exercises a greater retention effect. The member derives a significant benefit from remaining in state employment until retirement eligibility. However, once the member becomes eligible to retire, the PERS Plan I retirement system can act as a disincentive for retention. It is hard to keep a Plan I member on the job when he or she can receive up to 60% of his or her average final compensation by retiring.

According to the Office of State Actuary as of December 31, 1989, 49% of PERS Plan I members first became eligible to retire at age 59 or earlier, an age where they are still able to make significant contributions as state workers. Retaining these workers beyond retirement eligibility is likely to be a major challenge for the state in the years to come.

The thirty-year cap of Plan I reduces the incentive for continued employment once retirement eligibility is reached, and may impede efforts to retain those valuable state employees, some of whom may wish to continue their public service.

B. PLAN II

The PERS Plan II retirement age of 65 years delays the retirement time frame, compared to PERS Plan I; this results in a delayed retention effect. The more years an individual works and the closer he or she gets to normal retirement, the greater the incentive to work until state retirement eligibility. As an example, a 40-year-old PERS Plan II employee who began state employment at age 25 would need to work 25 or more years to be eligible for full retirement benefits at age 65 for a 40-year career. Contrast this with PERS Plan I, where that same 40-year-old could retire at age 55, working only a 30-year career. Because the Plan II employee is further away from normal retirement, the incentive to work to retirement occurs at a later time in his or her career.

The PERS Plan I member in the example may feel more inclined to remain a state employee until retirement given the prospect of achieving full retirement benefits in 15 years. The PERS Plan II member may feel less inclined to stay based on the retirement benefit, because his or her full retirement is still 25 years away.

On the other hand, once each member reaches age 55, there may be a disincentive to stay under Plan I, as previously discussed. Under Plan II, members are eligible for an actuarially reduced benefit at age 55, but cannot obtain a full benefit until age 65. The prospect of achieving full retirement benefits in Plan II would act as an incentive for retention.

The previous comparison is not meant to portray either plan as superior or inferior to the other, but to show the different dynamics each brings to a state employee's decision about continued employment or retirement.

C. RECENT DEVELOPMENTS

The Joint Committee on Pension Policy has been directed to examine ways to use the pension systems to encourage longer service workers to continue to serve the state. 1991 House Concurrent Resolution 4422 describes how many members retire as soon as they have earned 30 years of service, and some would be willing to work longer if the additional years of service would earn them a larger retirement benefit.

The House Concurrent Resolution directs "The Joint Committee on Pension Policy to continue its review of the various options that may be available for active members of the Teachers Retirement System, Plan I, and the Public Employees Retirement System, Plan I, to help provide themselves with post-retirement cost of living adjustments."

According to a 1986 American Association of Retired Persons (AARP) survey on "Employees Over 40 and Their Views", "government at all levels was the biggest single employer of workers 40 and older, and most respondents felt they should continue working and reported that their employers had not tried to influence their retirement plans one way or another. Those surveyed were receptive to retirement incentives whether the incentives were offered to postpone or to retire early. Flextime and part-time work were the most popular phased retirement options."

For those who do not wish to extend their preretirement employment, postretirement employment is becoming more common and can be very rewarding.

In the July 14, 1991 issue of Parade Magazine, an article titled "In This Town, The Retired Are Leaders", describes how at The Center For Creative Retirement in North Carolina, retirees work in schools, hospitals, prisons, libraries and other community organizations. One retired chemist remarked, "It's been one of the most fruitful semesters I've had in twenty years of research", speaking of his work at The University of North Carolina assisting students.

"These are people of talent - resourceful, bright and capable," said the Center's Director, Ronald J. Manheimer. "They had been an untapped resource."

The Legislature has recently acted in recognition of the value of retirees as workers. Before 1990, a PERS II retiree could not enter any non federal public employment without having his or her benefits suspended. In 1990 the Legislature initiated an important shift in state policy establishing post retirement employment opportunities for Plan II employees. This change recognizes that the expertise possessed by retired workers can provide a substantial benefit to the state.

In 1990, the Legislature passed Substitute House Bill 2644. That bill states that a "PERS Plan II retiree may work in eligible positions on a temporary basis for up to five months in a calendar year." It also allows PERS II retirees to work in an ineligible position without having their benefits suspended.

Continued efforts to make post-retirement employment or delayed retirement a more viable and attractive option may be a valuable way of addressing the human resource needs of the state.

III. PERSONAL FACTORS IN THE RETENTION OF STATE EMPLOYEES

Several factors other than the availability of a state pension can contribute to an individual's decision to retire. Health concerns, disability, level of wages, and the presence of personal assets are also important considerations when making a decision about retirement. Some of these factors tend to be individualized as health, personal assets and incomes levels vary. However, a common element affecting retention is Social Security.

Currently Social Security pays a person full benefits at age 65 and reduced benefits as early as age 62. The availability of Social Security results in a clustering of retirement dates around Social Security eligibility ages, the average age at retirement for a PERS member is 62.1 This demonstrates the strong effect that Social Security has on the retirement decision, and an additional factor in the retention of state employees.

IV. CONCLUSION

The efficiency and productivity of state government depends on attracting and retaining a qualified workforce. Demographics including, an aging workforce, expected retirements, turnover and increased competition for a decreasing labor pool will present challenges for the state as an employer in meeting its workforce needs.

The Public Employees Retirement System provides retirement benefits to employees for their years of service. These benefits have little affect in recruiting individuals into state service. The retention effect of PERS increases the closer the member gets to retirement, however, the incentive for continued employment is diminished once retirement eligibility is reached.

As Washington State government prepares for a Workforce 2000 environment and beyond, the benefits the Public Employees Retirement System provides is an important factor in meeting the employment needs of the state as an employer.

APPENDIX A

OCCUPATIONAL CLASSES IN STATE GOVERNMENT WITH THE HIGHEST EXPECTED RATES OF RETIREMENT, 1991-2000

EXPECTED RATES OF RETIREMENT 1991-2000 The ten occupational classes with the highest percentage of persons eligible to retire between 1991 the year 2000 are detailed in Appendix A, according to The Office of Financial Management personnel database as of June 27, 1991. Occupational classes include: state employees whose personnel and payroll is handled by the Department of Personnel including unclassified exempt employees under State Personnel Board merit system rules.

OCCUPATIONAL CLASS	NUMBER IN CLASS	ELIGIBLE FOR RETIREMENT	PCT
Employment Security	1804	865	47%
Safety Inspection	308	143	46%
Forests & Parks	1128	528	46%
Equipment & Plant Operation, Trades & Warehousing	3403	1428	41%
Unclassifed Exempt	5214	2105	40%
Institutional Food & Personal Service	1527	599	39%
Taxation	743	253	34%
Licenses & Permits	743	253	34%
Purchasing & Surplus Property	63	22	34%
Architecture,Engineering Planning & Right of Way	4122	1351	32%

Appendix H

Future Changes in Social Security Normal Retirement Ages

Increase in Social Security Normal Retirement Age

Source: Milliman and Robertson, Inc., Social Security Benefits, 1990.

The law provides that the age at which a person can retire and receive unreduced Social Security benefits will eventually be raised to 67. This change will be phased in according to the following table.

Year Born	Year Attain Age 62	Age Qualify for Full Benefits
1937 or before	1999 or earlier	65 yrs
1938	2000	65 yrs, 2 mos
1939	2001	65 yrs, 4 mos
1940	2002	65 yrs, 6 mos
1941	2003	65 yrs, 8 mos
1942	2004	65 yrs, 10 mos
1943-1954	2005-2016	66 yrs
1955	2017	66 yrs, 2 mos
1956	2018	66 yrs, 4 mos
1957	2019	66 yrs, 6 mos
1958	2020	66 yrs, 8 mos
1959	2021	66 yrs, 10 mos
1960 or later	2022	67 yrs

Early retirement benefits will still be permitted at age 62, but the worker who rates at that age in the year 2022 or later will see a 30% reduction in benefits. (Currently the reduction for retiring at age 62 is 20%.)

For those who choose to retire at some time between ages 62 and 65, the benefits will be permanently reduced by a percent. (Either 5/9 or 5/12, depending on several factors.)

Appendix I

Retirement Benefits in U.S. Public Retirement Systems

Retirement Age Trends in Public and Teachers Retirement Systems

Extracted from **The 1990 Comparative Study of Major Public Employee Retirement Systems**, State of Wisconsin Retirement Research Committee Staff Report No 79. Prepared by RRC Staff, Oct 1990.

A few PERS in this study have established new tiers in the last five or six years which substantially reduce benefit accruals for employees hired after the effective date. However, these PERS appear to be in the minority, and the general trend during the 1980's to improve benefit formulas appears to be continuing.

The 1988 comparative study noted that 21 of the 85 PERS had some improvements in their formulas over the 1986 survey. The 1990 survey also reflects that 14 of the PERS provided modest improvements in their multiplier for all years of service, and an additional three PERS improved the multiplier applying to years of service over 20 or 30 years. The multiplier improvements noted in the 1990 survey range from a .05% to 0.2% increase per year of service. This trend may reflect the strong economic conditions of the 1980's and a major turnaround in the country's economy may stall or reverse this trend.

Retirement Age. The 1990 study indicates that the trend continues in the public sector towards permitting normal retirement at earlier ages -- particularly for career employees with long service (25 to 30 years.) Of the 85 PERS in the 1990 study, 17 funds modified their normal retirement provisions by reducing the age and/or service requirements for normal retirement. On the other hand, three of the PERS (those from Minnesota) actually increased the normal retirement age for those subject to a new tier to correspond to Social Security requirements as they may be adjusted in the future.

Early Retirement. Most of the PERS in the 1990 study permit retirement before the normal age and service requirements have been met, but subject to actuarial discount to reflect the longer pay-out period. The most common age for allowing early retirement is age 55 with some minimum service, followed by age 50. There has been relatively little change during the last three comparative studies relative to early retirement.

Age 62 Normal. Age 62 is the earliest age at which Social Security benefits are payable, but with a 20% actuarial discount reflecting the longer pay-out period. The 1986 comparative study noted that 45 of the 85 plans would allow normal retirement at age 63 with at least 10 years of service. The 1988 survey noted that 49 of the 85 systems would allow normal retirement at 62 with 10 years or less, and the current survey reflects that 50 of the 85 systems would permit normal retirement at 62 with 10 years or less. Actually, 75 of the PERS in this study permit normal retirement at 62 with long service, and only 10 systems are tied to the age 65 normal retirement now found under Social Security. In fact, the most common normal retirement of the PERS in the 1990 study is age 60 with "X" years of service.

"X" Years and Out. Many public retirement systems have adopted "X years and out" provisions which allow participants to retire at any age (or a minimum age of 55) after "X" years of service. The number of plans with "X years and out" provisions for the last three biennial studies are as follows:

	1986	1988	1990
35 yr/ 55 or any age	8	9	8
30 yr/ 55 or any age	34	38	35
28 yr/ 55 or any age	1	1	2
27 yr/ 55 or any age	0	0	1
25 yr/ 55 or any age	7	7	9
20 yr/ 55 or any age	1	1	1
TOTALS*	**51**	**56**	**56**

(* Some plans have more than one "X years and out" provision.)

"Rule of Y ". In addition to the "X years and out" provisions, a number of PERS in the study have adopted a "rule" which permits normal retirement when age plus years of service equal a specified number. The rule provisions noted in the 1988 and 1990 studies are as follows:

	1988	1990
Rule of 95	1	0
Rule of 92	0	1
Rule of 90	4	2
Rule of 85	1	4
Rule of 80	1	2
Rule of 75	0	1
TOTALS	**7**	**10**

Actuarial Discount. The actuarial discount applied for early retirement presumably compensates for some or all of the longer pay-out period. Some systems use a reduction table based upon age which reflects the "actuarial equivalent adjustment" that is required to compensate the pension system for the longer pay-out period. A few systems do not provide early retirement because their normal retirement is already at 55 with long service.

The actuarial discount requirements for the various PERS are summarized as follows:

	Number of Funds
Discount rates less than 3%	1
Discount rates of 3% to 5.9%	22
Discount rates of 6% or more	22
Discount rates vary according to service or age	16
Employs actuarial discount table	12
Formula multiplier varies by age	4
Money purchase plan	1
No early retirement provided	7
TOTAL	**85**

It should be noted that many of the PERS in the 1990 study "subsidize" early retirement by applying reduction factors that are less than the full actuarial equivalent. Presumably, those PERS that require an actuarial discount of less than 5% per year under normal retirement may reflect some subsidizing of early retirement.

Benefit Formulas. Sixteen of the PERS in this study do not provide Social Security coverage for their membership. Such systems presumably have a higher formula multiplier to reflect the lack of Social Security coverage. Nearly all of the 16 systems have a multiplier ranging between 2% and 2.5% accrual for each year of service.

The 69 PERS in this survey that also provide Social Security coverage reflect varying multipliers as follows:

Benefit Multiplier	Number of Plans
21.0% to 1.3%	5
More than 1.3% to 1.5%	8
More than 1.5% to 1.7%	16
More than 1.7% to 2.0%	18
More than 2.0%	6
Varies by service	10
Employer option	2
Part or all Money Purchase	4*
TOTAL	**69**

(* Includes the two Indiana plans which provide a formula pension and an employee-funded annuity.)

Employee Contributions. The following summary of the 1988 and 1990 studies note an increase in PERS that are non-contributory -- i.e. the plan is fully funded by employer contributions in a manner similar to private sector retirement systems.

Employee Contributions	**1988**	**1990**
Employee rate of 0 - 5%	27	25
Employee rate over 5%	44	43
Rate is variable by plan or ?	4	4
Plan is non-contributory	10	13
TOTALS	**85**	**85**

Retirement Benefit Eligibility in Teachers Systems Only

State	Fund Name	Soc Sec	EE Contributions	Benefit Formula	Normal Retirement Provisions (Age/Yrs)	Early Ret. Provisions	Actuarial Discount
Alab.	TRS	Yes	5%	2.0125% x yrs. x FAS	60/10; A/25	None	N/A
Alas.	TRS	No	7.0%	2% x 1st 20 yrs; 2.5% x added yrs.	55/8; A/20;	50/8	6% @ yr.
Arka.	TRS*	Yes	6.0%	1.75% x yrs. x FAS	60/10; A/30	A/25	5% @ yr.
Calif.	TRS	No	8.0%	2% x yrs. x FAS	60/5	55/5; 50/30	6% - 3%
Conn.	TRS	No	6.0%	2% x yrs. x FAS	60/20; A/35	55/20; A/25	6% - 4%
Geor.	TRS	Yes	6.0%	2% x yrs. x FAS	62/10; A/30	60/10	3% @ yr.
Ill.	TRS	No	8.0%	1.67% x 1st 10 yr. to 2.3% x yr. 30+	62/5; 60/10; 55/35	55/20	6% @ yr.
Ind.	TRF	Yes	3.0%	1.1% x yrs. x FAS + "EE" M.P. Annuity	65/10; 60/15; Rule-85**	50/15	1.2% - 5%
Kent.	TRS	No	8.375% - 9.855%	2 1/2 x yrs. x FAS	60/5; A/27	55/5	5% @ yr.
Louis.	TRS*	No	8.0%	2.5% x yrs. x FAS	65/20; 55/25; A/30	60/10; A/20	Multiplier Varies
Mass.	TRS	No	8% / 10% (split)	2.5% x yrs. x FAS (at 65)	65/10	55/10; A/20	Multiplier Varies
Mich.	PSERS	Yes	3% - 4%	1.5% x yrs. x FAS	60/10; 55/30	55/15	6% ea. yr.
Minn.	TRS	Yes	4.5%	1.5% x yrs. x FAS	Soc. Sec. Normal	55/10	4% - 5%
Mou.	PSRS	No	10%	2.1% x yrs. x FAS	60/5; A/30	55/5; A/25	Act. Table
Mont.	TRS	Yes	7.044%	1.67% x yrs. x FAS	60/A; A/25	50/5	6% - 3.6%
Nebr.	TRS	Yes	6.52%	1.65% x yrs. x FAS	65/5; 60/35	60/5; A/35	3% @ yr.
N.J.	TERS	Yes	5.05% - 9.09% (age)	1.67% x yrs. x FAS	60/A; 55/25	A/25	3% @ yr.
N.M.	ERA	Yes	7.6%	2.15% x yrs. x FAS	65/5; A/25; Rule-75**	A/5	2.4% - 7.2%
N.Y.	TRS*	Yes	3%	(2% x 1st 30 yrs) + (1.5% x added yrs.)	62/10; 70/5; 55/30	None	N/A
N.D.	TRF	Yes	6.75%	1.275% x yrs. x FAS	65/5; Rule-85**	55/5	6% @ yr.
Ohio	STRS	No	9.25%	(2.1% x 1st 30 yrs) + (2.5% added yrs.)	65/5; A/30	55/25; 60/5	3% @ yr.
Okla.	TRS	Yes	5.5% / 10.5% (split)	2% x yrs. x FAS	62/10; R-80**	55/10	Act. Table
Penn.	PSERS	Yes	6.25%	2% x yrs. x FAS	62/1; 60/30; A/35	A/10; 55/25	3% @ yr.
Texas	TRS	Yes	6.4%	2% x yrs. x FAS	65/5; 60/20; 55/30	55/5; A/30	Act. Table
Verm.	TRS*	Yes	Non-Contributory	1.25% x yrs. x FAS	62/10	55/10	6%
Wash.	TRS*	Yes	6.99%	2% x yrs. x FAS	65/5	55/20	7% @ yr.
W.V.	TRS	Yes	6.0%	2.2% x yrs. x FAS	60/5; 55/30; A/35	None	N/A

*** More than one Plan or Tier** **** Rule of Age and Service**

Retirement Benefit Eligibility in State & Local Systems Only

State	Fund Name	Soc Sec	EE Contributions	Benefit Formula	Normal Retirement Provisions (Age/Yrs)	Early Ret. Provisions	Actuarial Discount
Alab.	ERS	Yes	5%	2.0125% x yrs. x FAS	60/10; A/30; A/25	A/25	6.6% @ yr.
Alas.	PERS*	No	6.75%	2% x 1st 10 yr; 2 1/4% x 2nd 10; 2.5% + yr.	60/5; A/30	55/5	Act. Table
Arka.	PERS	Yes	Non-Contributory	(1.8% x yrs. x FAS) - (Partial PIA)	65/10; A/30	55/10	6% @ yr.
Calif.	PERS*	Yes	Non-Contributory	2% at 60; 2.418% at 63	60/5	50/5	Multiplier Varies
Conn.	SERS	Yes	Non-Contributory	1.33% + 0.5% FAS over $16,100	65/10; 70/5	55/10	6% @ yr.
Geor.	ERS	Yes	3% / 5% (split)	1.5 x yrs. x FAS	65/10; A/30	60/10	5% @ yr.
Ill.	SERS	Yes	4.0%	1% x 1st 10yr. to 1.5% x yr. over 30	60/8; A/35	55/30	6% @ yr.
Ill.	MRF*	Yes	4.5%	(1.67% x 1st 15 yr.) + 2% x added yrs.	60/8; 55/35	55/8	3% @ yr.
Ind.	PERF	Yes	3.0%	1.1% x yrs. x FAS + "EE" M.P. Annuity	50/15	60/26	1.2% - 5%
Kent.	ERS*	Yes	4.25% - 5.0%	1.91% - State; 2.0% - County	65/4; A/30	55/5; A/25	5% - 4%
Louis.	SERS	No	8.0%	2.5% x yrs. x FAS + $300 @ yr.	60/10; 55/25; A/30	50/10; 45/25	Act. Table
Mass.	SERS	No	8.0%	2.5% x yrs. x FAS (at 65)	65/10	55/10; A/20	Multiplier Varies
Mich.	SERS	Yes	Non-Contributory	1.5% x rys. x FAS	60/10; 55/30	55/15	6% ea. yr.
Mich.	MERS*	Yes	Varies by Plan	Employer Plan Options	60/10	55/15; 50/25	6%
Minn.	MSRS*	Yes	4.34%	1.5% x yrs. x FAS	Soc. Sec. Normal	55/5; A/30	Act. Table
Minn.	PERA*	Yes	4.47%	1.5% x yrs. x FAS	Soc. Sec. Normal	55/3	6%
Mou.	SERS*	Yes	Non-Contributory	1.5% x yrs. x FAS	65/4; 60/15; 55/30	55/10	7.2% @ yr.
Mou.	LAGERS	Yes	Zero - 4%	Employer Plan Options	60/5	55/5	6% @ yr.
Mont.	PERS	Yes	6.3%	1.79% x yrs. x FAS	65/A; 60/5; A/30	55/5; A/25	Act. Table
Nebr.	SERS*	Yes	3.6 / 4.8%	Money Purchase	65/A	55/5	Money Purchase
N.J.	PERS	Yes	4.96% - 6.65% (age)	1.67% x yrs. x FAS	60/A; 55/25	A/25	3% @ yr.
N.M.	PERA	Yes	6.18% - 8.5%	2.5% x yrs. x FAS	65/5-63/11-60/20; A/25	None	-
N.Y.	ERS*	Yes	3%	(2% x 1st 30 yrs.) + (1.5% x added yrs.)	62/10; 70/5	None	-
N.C.	LGERS	Yes	6%	1.63% x yrs. x FAS	65/5; A/30; 60/25	50/20; 60/5	3% @ yr.
N.D.	PERS	Yes	4%	1.65% x yrs. x FAS	65/A; R - 90**	55/5	6% @ yr.
Ohio	PERS	No	8.5%	(2.1% x 1st 30 yrs.) + (2.5% added yrs.)	60/5; A/30	55/25	3% @ yr.
Okla.	PERS	Yes	?	2% x yrs. x FAS	62/6; Rule-80**	55/10	Act. Table
Penn.	SERS	Yes	6.25%	2% x yrs. x FAS	60/3; A/35	A/10	Act. Table
Texas	ERS	Yes	6.0%	2% x yrs. x FAS	60/10; 55/30	55/25; 50/30	Act. Table
Texas	MRS*	Yes	6.0% Average	Money Purchase Option	60/10; 50/25; A/28	None	-

*** More than one Plan or Tier** **** Rule of Age and Service**

State	Fund Name	Soc Sec	EE Contributions	Benefit Formula	Normal Retirement Provisions (Age/Yrs)	Early Ret. Provisions	Actuarial Discount
Verm.	SRS*	Yes	Non-Contributory	1.25% x yrs. x FAS	62/10	55/10	6% @ yr.
Wash.	PERS*	Yes	4.99%	2% x yrs. x FAS	65/5	55/20	7% @ yr.
W.V.	PERS	Yes	4.5%	2% x yrs. x FAS	60/5	55/10	6%
Milw.	City	Yes	5.5%	2% x yrs. x FAS	60/4	55/15	Act. Table
Milw.	County*	Yes	Non-Contributory	1.5% x yrs. x FAS	60/A; 55/30	55/15	5% @ yr.

Retirement Benefit Eligibility in State, Local & Teachers Systems Combined

State	Fund Name	Soc Sec	EE Contributions	Benefit Formula	Normal Retirement Provisions (Age/Yrs)	Early Ret. Provisions	Actuarial Discount
Ariz.	SRS	Yes	4.69%	2% x yrs. x FAS	65/A; 62/10; Rule - 85**	50/5	3%
Colo.	PERA	No	83.0%	2.5% x 1st 20 yr. + 1.25% added yr.	65/5; 60/20; 55/30; A/35	55/20; 60/5	4%
Dela.	SEPP	Yes	3% / 5% (split)	1.67% x yrs. x FAS	65/5; 60/15; A/30	55/15; A/25	4.8% @ yr.
Flor.	FRS	Yes	Non-Contributory	1.6% at 62; 1.68% at 65	62/10; A/30	A/10	5% @ yr.
Hawaii	ERS*	Yes	Non-Contributory	1.25% x yrs. x FAS	62/10; 55/30	55/20	6%
Idaho	PERS	Yes	5.34%	1.67% x yrs. x FAS	65/5; Rule - 90**	55/5	3% - 8%
Iowa	PERS	Yes	3.73% ($28,000)	1.67% x yrs. x FAS	65/4; Rule - 92/30 yrs.	55/4	3% - 6%
Kans.	PERS	Yes	4.0%	1.4% x yrs. x FAS or 1.5% with 35 yrs.	65/A; 60/35; A/40	55/10	3.6% - 7.2%
Maine	SRS	No	6.5%	2.0% x yrs. x FAS	60/10	A/25	2.25% @ yr.
Mary.	SRS*	Yes	5% over S.S. Base	(.8% x 18,600 FAS) + (1.5% x excess FAS)	65/2; 64/3--62/5; A/30	55/15	6% @ yr.
Miss.	PERS	Yes	6.5% (75,600)	1.875% x 1st 30 yrs.) + (2% x added yrs.)	60/4; 55/25; A/30	A/25	6 2/3%
Nevada	PERS	No	Non-Contributory	2.5% x yrs. x FAS	65/5; 60/10; A/30	A/5	4%
N.H.	NHRS	Yes	4.6% / 9.2% (split)	1.67% x yrs. x FAS-SS offset at 65	60/A	50/10	Varies by service
N.C.	TSERS	Yes	6%	1.63% x yrs. x FAS	65/5; 60/25; A/30	50/20; 60/5	3% @ yr.
Oreg.	PERS	Yes	6.0%	1.67% x yrs. x FAS	58/A; 55/30	55/A	8% @ yr.
R.I.	ERS	Yes	7.5% - 8.5%	(1.7% x 1st 10 yrs.) to 3.0% yr. over 20	60/10; A/28	None	-
S.C.	SCRS*	Yes	6.0%	1.82% x yrs. x FAS	65/A; A/30	60/5	5% @ yr.
S.D.	SRS	Yes	5%	(1.25% x FAS) or (2% - PIA)	65/5; 60/R-85**	55/5	3% @ yr.
Tenn.	CRS	Yes	Non-Contributory	(1.5% x yrs. x FAS) + .25% x fas 16,800	60/10; A/30	55/10; A/25	4.8% @ yr.
Utah	SRS	Yes	Non-Contributory	2% x yrs. x FAS + 401(k)	65/4; A/30	62/10; 60/20; A/25	3% - 7%
Virg.	SRS*	Yes	5.0%	1.65% x yrs. x (FAS - 1,200)	65/A; 55/30	55/5	6% - 4.8%
Wyom.	WRS	Yes	5.57%	2% x yrs. x FAS	60/4	50/4	Act. Table
Wis.	WRS	Yes	5% + 1%	1.6% x yrs. x FAS	65/5; 57/30;	55/5	Varies by service

*** More than one Plan or Tier**   **** Rule of Age and Service**

Fire Fighters Survey of Pension Plans

Extracted from the International Association of Fire Fighters Survey of Pension Plans, 1990, Washington D.C.

Question 44:
Retirement Eligibility Requirements

	Frequency	Percent
20 yrs & out	24	20.5%
30 yrs & out	5	4.3
20 yrs & age 50	12	10.3
20 yrs & age 55	7	6.0
25 yrs & age 50	5	4.3
25 yrs & age 55	2	1.7
Age 50	6	5.1
Age 55	8	6.8
Age 62	1	0.9
Age 65	2	1.7
Other	35	29.9
No response	10	8.5

Question 47:
Retirement Benefit Formula

	Frequency	Percent
1.0% per year	8	6.8%
1.25% per year	2	1.7
1.5% per year	4	3.4
2.0% per year	24	20.5
2.25% per year	1	0.9
2.5% per year	14	12.0
2.75% per year	5	4.3
3.0% per year	1	0.9
50.0% of salary	1	0.9
55.0% of salary	1	0.9
70.0% of salary	1	0.9
Other	29	24.8
No response	26	22.2

Question 53:
Are Early Retirement Benefits Provided?

	Frequency	Percent
Yes	66	56.4%
No	43	36.8
No response	8	6.8

Question 54:
What is the Minimum Retirement Age?

	Frequency	Percent
Age 35	2	1.7%
Age 40	3	2.6
Age 45	4	3.4
Age 50	12	10.3
Age 55	14	12.0
Age 60	2	1.7
Age 65	2	1.7
Other	25	21.4
No response	53	45.3

Question 55:
What is the Minimum Service Requirement?

	Frequency	Percent
5 years	10	8.5%
10 years	18	15.4
15 years	3	2.6
20 years	21	17.9
Other	13	11.1
No response	52	44.4

Question 32:
Employer's Contribution Paid By?

	Frequency	Percent
Local government	84	71.8%
State government	4	3.4
Local & state	20	17.1
Other	6	5.1
No response	3	2.6

Appendix J

Interesting Plans

Public Plans with Unusual Designs

California

California's new mandatory non-contributory retirement plan for state miscellaneous employees provides a benefit based on 1.25% of AFC (3 years) at age 65. Retirement at earlier ages (beginning at age 55/10), reduces the percent of salary used in calculating benefits.

State miscellaneous members are those employed by the state and universities who are not involved in law enforcement, fire suppression or the protection of public safety.

Public employers outside of state government can chose from several retirement plans which offer varying normal retirement ages and benefit formulas. None of these options are non-contributory.

Public agencies employing the following groups of employees are eligible to select an optional benefit formula: local miscellaneous, police and fire employees; county peace officers; and local safety officers other than police and fire.

Employee contributions in the local optional plans are approximately 7.0% to 9.0%.

Hawaii

State offers one plan with different tiers for different types of employees. All but the new general employees system are based on a formula of 2.0% X 3 yr AFC. Benefits include an automatic 2.5% non-compounding COLA. Retirement eligibility is at 55/4.5.

Requirements of the non-contributory plan include 10-year cliff vesting; benefit eligibility at 55/30.

	Employee Contribution	Employer Contribution
Judges and Elected Officials	12.2%	18.0%
Police and Firefighters	12.2%	25.9%
General State Employees (including teachers)	7.8%	18.0%
New General Employees (Non-Contributory)		18.0%

Nebraska

Nebraska's two defined contribution plans (414H) for state and county employees have been in operation since 1963. New members are mandated into this tier.

The state and county plans are basically identical except for membership eligibility requirements. For state employees membership is optional until age 30/ 2 years. County employees must join when their meet hours requirement.

	Employer Contributions	Employer Contributions
State PERS	3.6% up to $24,000 4.8% over $24,000	Matches at 156.0% of Employee Contribution
County PERS (Includes Sheriffs)	3.2%	Matches at 150.0% of Employee Contribution
Both Systems: Normal Retirement:	Age 55/5	

Utah

Consists of a defined benefit plan and defined contribution plan (1401K), both non-contributory for members (State, Local, School Employees).

For employees, plan is mandatory. Employers have the option of joining this tier or the previous contributory system. Most choose the non-contributory system.

Plan provides different levels of members. Level A includes state employees and teachers. Level B includes local government. Split was made to appease local governments who resisted subsidizing the higher costs of a teachers' retirement system.

	Total Employer Contribution	DB Plan	DC Plan
Level A (Teachers, State Employees)	13.30%	11.77%	1.50%
Level B (Local Government Employees)	6.85%	6.72%	Optional

Defined Benefit Plan

Normal Retirement:	65/4: 62/10; 60/20; A/30
Early Retirement:	A/25 with full actuarial reduction
Formula:	2.0% x YOS x AFC (3 yr.)
COLA:	CPI capped at 4.0%, non-compounding

West Virginia

New defined contribution plan (414H) for Teachers was a legislative initiative aimed at cutting costs to the state. It became effective July 1, 1991. Currently there are 1,100 members in the plan.

Members of the previous defined benefit tier, have the option of transferring to the D.C. plan at any time. Contributions to the defined benefit plan remain in that system. At retirement members will receive a "split benefit" paid partially from the D.B. plan and partially from the D.C. plan.

Milliman and Robertson set-up and administers the plan. Currently they offer five funds for members to choose among.

	Employee	Employer
Plan Contributions:	4.5%	7.5%
Normal Retirement:	Age 55/12	

Phased Retirement Programs in Other States

New York

State Employees:

The model phased retirement program which was developed as part of New York state's 1984 feasibility study was never adopted by the Legislature. In my discussion with one of the study's research associates, I-Hsin Wu, she expressed the opinion that the reason for the Legislature's lack of enthusiasm was the undetermined cost of the program. The labor unions were also divided on just how the program should be structured.

As developed, New York's phased retirement program would have prorated participants' salaries without adversely affecting their retirement benefits. While some cost savings would be realized by the salary reductions, maintaining the full value of retirement benefits would have incurred an increased cost over other part-time employment. It was not clear whether the final result would have constituted a cost or saving to the state.

The last time phased retirement was considered by the Legislature was in 1986. Last year, one of the major state agencies requested information on the proposal with the intention of offering it to its employees. To implement the plan, however, changes to civil service laws for all state public employees would have had to be adopted. As a result, no action was taken.

Teachers:

The only program they have offered that approximates a phased retirement approach is a one-year incentive program offered last year. Their motivation however, was not to ease members into retirement, but to cut costs.

Professors at the state university were offered the opportunity to continue to work full-time while receiving only 60% of pay. In return, members received full service credit and full pension benefits based on their pre-program service credit and AFC.

After one year, members left active employment and continued to receive benefits based on the additional service credit earned and their full-time AFC. No reduction was made for the amount of benefits already received. Fifteen professor took advantage of this one-time offer.

California

Currently state miscellaneous, state industrial, and employees of contracting local employers meeting the required age and service requirements are eligible to reduce their work time, continue working and receive a partial service retirement allowance. The policy goal is to ease members into retirement, avoiding abrupt transition from employment.

To be eligible:

- 1st tier members must be at least age-50 with 20 years of service;
- 2nd tier members must be at least age-55 with 20 years of service; or
- Have the minimum years of service and reached the minimum age for normal retirement under the member's current plan and; age and service total 65 years or more.

Other features of the program:

- No COLA's for the partial service retirement allowance.
- May change jobs while in partial retirement.
- There are no provisions which allow members to provide for a beneficiary other than the same pre-retirement death benefits provided all members.
- Members may not continue partial retirement if they separate from state service.
- Members can decrease their work time once a year or increase work time once every five years.
- Once a member withdraws from the partial retirement program, they cannot reapply for five years.

At full retirement:

- Reduction factors applied to compensate for benefits already received.

Program has not been very popular for several reasons:

- Liberal post-retirement policies allow members to work up to 96 hours a year while receiving an unreduced retirement benefit.
- Up until last year, one of the eligibility requirements for participation was having reached age-62.
- Until last year, only state employees were eligible to participate.
- Program may not be very well advertised to members.

Currently there are 26 members enrolled in the program. Fifteen joined after the age requirement was changed to age/service. In total, 70 members have participated since the program's inception in 1984.

Administrators did not know of any other states with partial retirement programs.

Iowa

I talked with a number of administrators from the Iowa Public Employees Retirement System, and none of them had heard of the phased retirement program. One administrator, Martin Jensen, flatly denied that such a program was ever implemented.

Whether the state still has this option on the books and nobody ever takes advantage of it, or the program was abolished for lack of participation is unclear. What is clear, is that the program's design did not appeal to anybody.

According to the description contained in the New York feasibility, Iowa allowed employees to work a reduced schedule during the five years prior to full retirement. Full-time employees who were at least 60 years old, with 20 years of service were eligible.

Iowa supplemented income during the phasing period with a bonus of ten percent of full-time salary. Service and salary credit are prorated in calculating retirement benefits. Participants received most fringe benefits as full-time employees. Vacation and sick leave were accrued on a pro-rated basis.

Appendix K

Private Sector

Trends in the Private Sector

Source: U.S. Department of Labor, Bureau of Labor Statistics, Employee Benefits in Medium and Large Firms, 1989, June 1990.

Defined benefits:

Defined benefit plans remain the most frequent form of providing benefits for retirement. 87% of workers in a retirement plan were in a defined benefit plan. While this percentage has declined in recent years, at least part of the decrease can be attributed to changes in reporting.

- 6% of participants were in plans with formulas based on earnings, most frequently on earnings during 5 consecutive years of employment.
- Benefit formulas were integrated with Social Security benefits in plans affecting 63% of participants.
- Common eligibility requirements for an unreduced pension were: Age 65 with no specified length of service, Age 62 with 10 years of service, and 30 years of service at any age.
- 8% of covered workers could retire with a reduced pension at age 55, most commonly after 10 years of service.
- The employer paid the full cost of defined benefits for 96% of participants. For employees who had to pay part of the cost, contributions were generally expressed as a percent of earnings.

Defined Contribution:

Defined contribution plans are available to 48% of workers. They are more common among white-collar than blue-collar workers.

- The most frequently observed type of defined contribution plan was a savings and thrift plan. For participants in these plans, the typical employer matching rate was 50% and generally applied to the first 6% of earnings saved by the employee.
- 92% of participants in savings and thrift plans contributed on a pre-tax basis.
- 37% of participants in all retirement and capital accumulation plans were enrolled in more that one plan. Where more than one plan was available, the combination was most often a defined benefit pension plan and savings and thrift plan.
- The majority of participants in savings and thrift plans also participated in other plans.

Benefit Levels at Normal Retirement Age 65

Total Retirement Income as a Percentage of Final Pay

This section provides an overview of benefits and plan characteristics and a discussion of early retirement windows.

Benefit Levels

Normal Retirement

The pension benefit calculations for employees retiring in 1991 at age 65 consider two service periods -- 15 and 35 years. The survey also shows projected benefits for an employee retiring at age 65 in 2026 with 35 years of service. Figures 1, 2, and 3 show distributions of replacement rates, the percentage of final year's pay replaced by retirement income from pension plan benefits and Social Security, for each of the hypothetical retirees.

Figure 1 shows the distribution of replacement rates for a current retiree at age 65 with 15 years of service. With one exception, income replacement levels range from 36.0 to 53.5 percent; most plans in combination with Social Security replace 40 to 44 percent of final pay.

In **Figure 2**, the distribution of replacement rates for a current retiree at age 65 with 35 years of service is shown. With one exception, income replacement levels range from a low of 55.4 percent to a high of 74.5 percent. Forty-seven of the 50 surveyed plans in combination with Social Security replace at least 60 percent of final pay.

Figure 3 shows the distribution of replacement rates for a retiree in 2026 at age 65 with 35 years of service. Calculations of retirement benefits in 2026 are based on plan provisions currently in effect. Plans that use career average pay or flat dollar benefit amounts often provide periodic updates that are not reflected in the current provisions. Thus, projected replacement rates for such plans may be lower than rates for plans that base benefits on final average pay. Income replacement levels range from 36.2 to 75.7 percent of final pay. Twenty-seven plans replace more than 60 percent of final pay under the projection, and 7 plans replace less than 50 percent of final pay.

Figure 1

Age 65 with
15 Years of Service

Includes Social Security

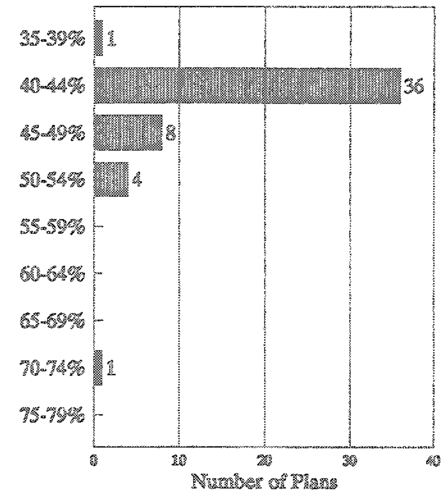


Figure 2

Age 65 with
35 Years of Service

Includes Social Security

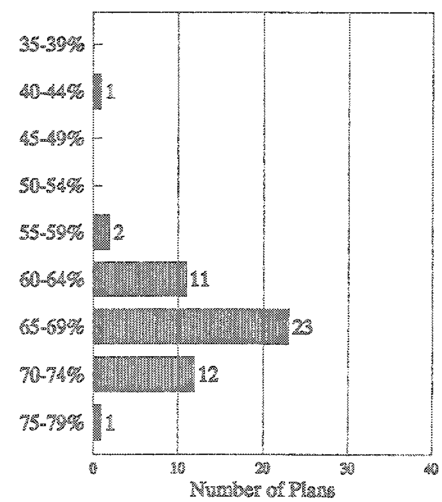
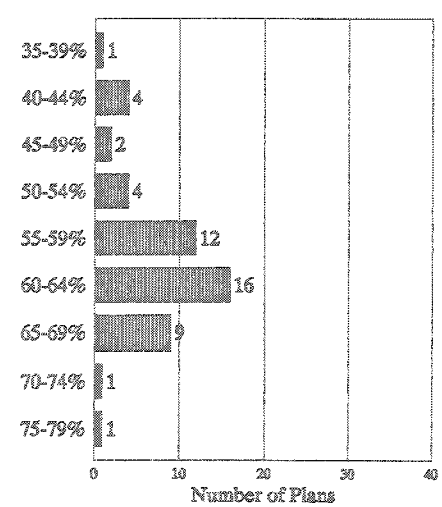


Figure 3

Retirement in 2026--
Age 65 with
35 Years of Service

Includes Social Security



Early Retirement

The survey also includes pension benefit calculations for early retirement in 1991 at the following four age and service combinations:

Age 62 with 32 years of service

Age 60 with 30 years of service

Age 55 with 30 years of service

Age 55 with 25 years of service

The distributions of replacement rates for each of these retirees are shown in Figures 4 through 7. These replacement rates only consider plan benefits;d Social Security benefits have not been included.

The measure of income replacement is determined on the basis of a level lifetime benefit that is equivalent to the actual pattern of early retirement payments. This affects replacement rates for plans providing supplemental benefits payable from the date of early retirement until age 62 or 65. Under the equivalent lifetime benefit concept, a supplemental benefit is converted to a reduced benefit that is paid throughout the retiree's lifetime.

Figure 4 shows that 36 of the 50 plans replace between 35 and 44 percent of final year's pay when retirement occurs at age 62 with 32 years of service.

Figure 5 shows that 32 plans replace 35 to 44 percent of final year's pay when retirement occurs at age 60 with 30 years of service.

Figure 4

Age 62 with 32 Years of Service

Includes Social Security

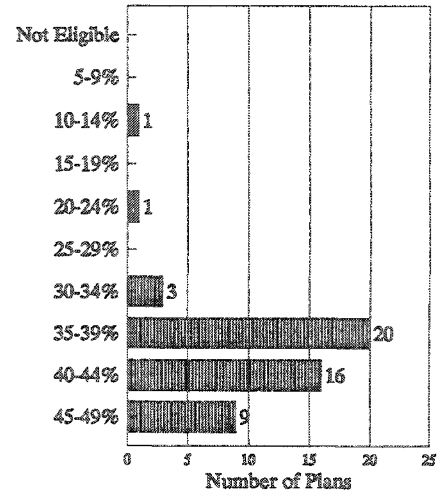
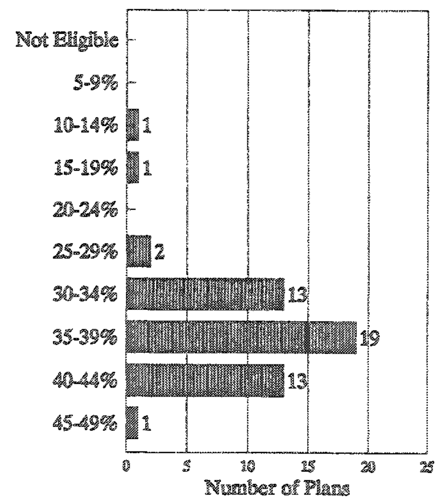


Figure 5

Age 60 with 30 Years of Service

Includes Social Security



Early Retirement Prior to Age 65

Plan Benefit as a Percentage of Final Pay

Two plans do not provide an early retirement benefit at age 55 with 30 years of service. **Figure 6** shows that 39 of the remaining 48 plans replace at least 25 percent of final year's pay.

Four plans do not provide early retirement benefits at age 55 with 25 years of service. **Figure 7** shows that 35 of the remaining 46 plans replace at least 20 percent of final year's pay.

Figure 6

Age 55 with 30 Years of Service

Does Not Include Social Security

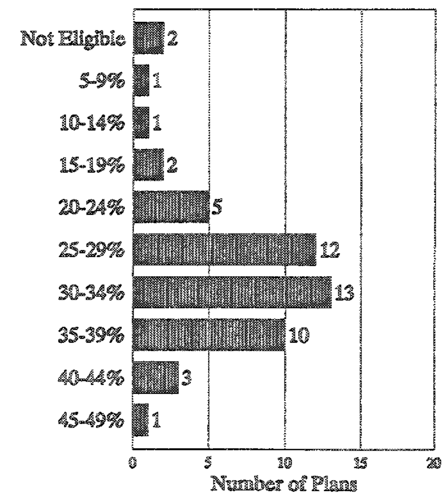
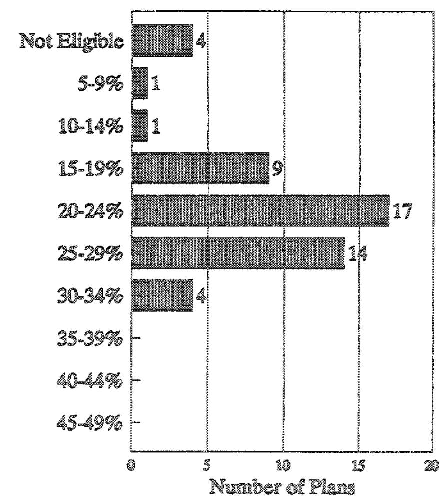


Figure 7

Age 55 with 25 Years of Service

Does Not Include Social Security



Benefit Formula

All but eight of the pension plans coordinate benefits with Social Security. Thirty-eight plans have only one formula coordinated with Social Security. Of these, 22 coordinate with Social Security using an offset formula and 16 coordinate based on an excess formula. Each of the remaining four plans has more than one formula coordinated with Social Security.

Employee Contributions

Figure 8 shows that 44 of the 50 pension plans do not permit employee contributions. Six plans require employee contributions for participation in all or a portion of the plan's benefits.

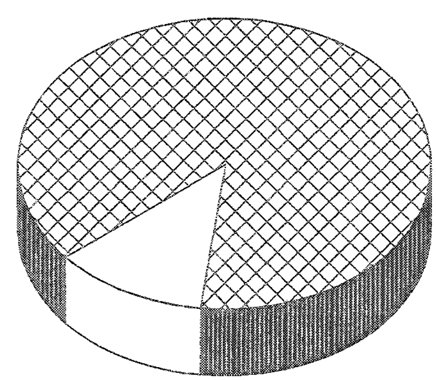
Figure 8

Employee Contributions

Number of Plans:

Contributory 6

Noncontributory 44



Benefit Levels at Age 55 Retirement

Early Retirement

Figures 9-11 show the availability of pension benefits at early retirement ages. Forty-four plans provide unreduced benefits at age 62 under some circumstances; the remaining 6 plans provide reduced benefits. All 50 plans provide an early retirement benefit by age 60 if certain service conditions are met, and 23 plans provide an unreduced benefit. Forty-eight plans provide for early retirement benefits at age 55. Eleven plans provide an unreduced benefit at age 55 under some conditions.

Some plans supplement early retirement benefits. The supplements are designed to fill in benefits that will be provided later by Social Security and may take the form of an additional benefit or deferral of the reduction for Social Security.

Figure 9

Early Retirement--
Age 62 Benefits

Number of Plans:

Unreduced 44

Reduced 6

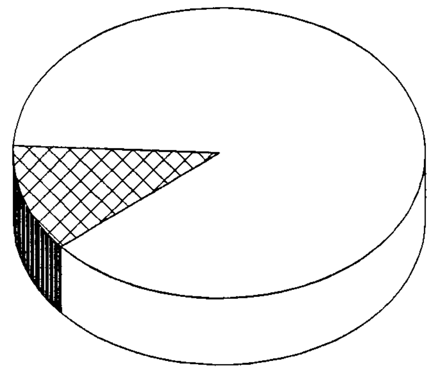


Figure 10

Early Retirement--
Age 60 Benefits

Number of Plans:

Unreduced 23

Reduced 27

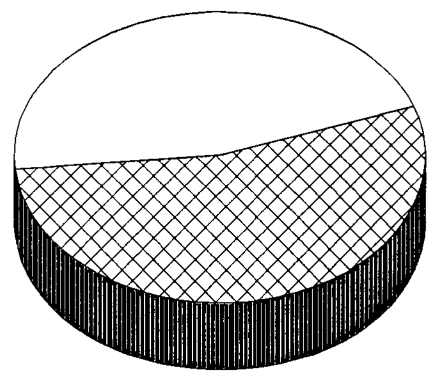


Figure 11

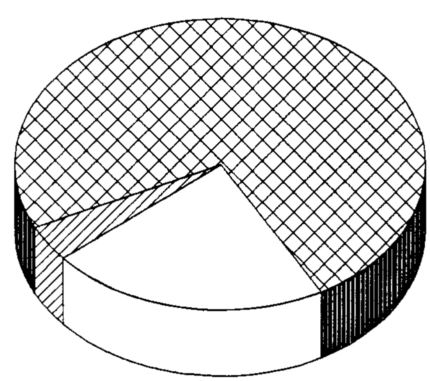
Early Retirement--
Age 55 Benefits

Number of Plans:

Unreduced 11

Reduced 37

None 2



Sample of Private Sector Early Retirement Reduction Factors

The following has been derived from A Survey of Retirement, Thrift, and Profit Sharing Plans Covering Salaried Employees of 50 Large U.S. Industrial Companies as of January 1, 1991. The Wyatt Co.

Company	Reduction Factor Per Year	Age
Allied-Signal	3% Prior to	62
Aluminum Co. of America	7-9% Prior to	62
Amoco	5%/yr. Prior to	60
Anheuser-Busch	3%/yr. Prior to	62
Ashland Oil	3-5% Prior to	62
AT&T	6% Prior to	55
Caterpillar	4%/yr. Prior to	62
Chevron	5%	55-62
Chrysler	6 1/2%/yr. Prior to	62
Coastal	4%/yr. Prior to	62
Coca-Cola	3%/yr. Prior to	62
Digital Equipment	6 2/3% from	60-65
	3 1/2% Prior to	60
Dow Chemical	6%/yr. Prior to	60
Dupont	5%/yr.	
Eastman Kodak	5%/yr.	
Exxon	5%/yr.	
General Dynamics	2 1/2%/yr.	
General Electric	0%	
General Motors	7.2%	60-65
Georgia-Pacific	Actuarial	
Goodyear	4.8%/yr.	
Hewlett-Packard	6 2/3%/yr.	60-65
	3 1/3%/yr. Prior to	60
International Paper	4%/yr.	
ITT	5%/yr. Prior to	60
	3%	60-65

Company	Reduction Factor Per Year	Age
Johnson & Johnson	4%/yr.	
Lockheed	2.5%/yr.	
Minnesota Mining & Mfg	5%/yr.	
Mobil	5%/yr.	
Monsanto	3%/yr.	
Motorola	6 2/3%	60-65
	3 1/3% Prior to	60
PepsiCo	4%/yr.	
Philip Morris	6%/yr.	
Philips Petroleum	5%/yr.	
RJR Nabisco	Actuarial	
Rockwell International	7 1/2%/yr.	
Sara Lee	5%/yr.	
Shell Oil	5%/yr.	
Sun	Actuarial	
Tenneco	3%	60-62
	6% Prior to	60
Texaco	5%/yr.	
Time Warner	6 2/3%/yr.	
Unilever U.S.	4%/yr.	
Union Carbide	5%/yr.	
Unisys	6%/yr.	
United Technologies	2.4%/yr.	
Unocal	3%/yr.	60-62
	5%/yr. Prior to	60
USX	Table	
Westinghouse	3%/yr. 30+ yrs.	
	4%/yr. Otherwise	
Xerox	5%	

Sample of Private Sector Normal Retirement Benefits

The following has been extracted from A Survey of Retirement, Thrift, and Profit Sharing Plans Covering Salaried Employees of 50 Large U.S. Industrial Companies as of January 1, 1991. The Wyatt Co.

	Normal Retirement Benefits for Retirement in 1991 at Age 65 with 35 Years of Service		Normal Retirement Benefits for Retirement in 2026 at Age 65 with 35 Years of Service	
	% of Final Pay	% of Final Pay Incl SS	% of Final Pay	% of Final Pay Incl SS
Allied-Signal	41.5%	65.3%	41.1%	58.6%
Aluminum Co. America	40.1	64.0	28.2	45.7
Amoco	43.2	67.0	46.4	63.8
Anheuser-Busch	48.6	72.4	51.1	68.5
Ashland Oil	46.5	70.4	49.2	66.6
AT&T	44.7%	68.5%	24.6%	42.0%
Caterpillar	46.9	70.7	46.9	64.3
Chevron	40.2	64.0	44.2	61.6
Chrysler	48.3	72.1	50.9	68.3
Coastal	41.7	65.5	44.9	62.3
Coca-Cola	41.9%	65.7%	41.4%	58.8%
ConAgra	38.2	62.0	33.6	51.0
Digital Equipment	43.3	67.2	23.1	40.5
Dow Chemical	39.1	62.9	41.7	59.1
Du Pont	39.7	63.5	40.9	58.3
Eastman Kodak	43.0%	66.9%	45.6%	63.0%
Exxon	42.1	66.0	45.4	62.9
General Dynamics	41.7	65.5	41.7	59.1
General Electric	33.9	57.8	40.4	57.8*
General Motors	50.4	74.2	47.8	65.2*
Georgia-Pacific	50.4%	74.2%	22.3%	39.8%
Goodyear	45.0	68.8	22.1	39.5*
Hewlett-Pakard	31.5	55.4	32.2	49.6
International Paper	40.3	64.1	43.5	60.9
ITT	47.6	71.5	50.4	67.9

* Includes Employees Final Benefit

	Normal Retirement Benefits for Retirement in 1991 at Age 65 with 35 Years of Service		Normal Retirement Benefits for Retirement in 2026 at Age 65 with 35 Years of Service	
	% of Final Pay	% of Final Pay Incl SS	% of Final Pay	% of Final Pay Incl SS
Johnson & Johnson	40.2%	64.0%	43.4%	60.8%
Lockheed	44.2	68.1	46.5	64.0
Minnesota Mining & Mfg.	43.5	67.3	43.6	61.0
Mobil	41.4	65.2	44.2	61.6
Monsanto	46.3	70.1	40.9	58.3
Motorola*	17.1%	40.9%	58.3%	75.7%
PepsiCo	43.3	67.2	42.9	60.4
Philip Morris	50.7	74.5	50.4	67.8
Phillips Petroleum	41.0	64.8	44.2	61.6
RJR Nabisco	48.4	72.3	35.3	52.7
Rockwell International	43.9%	67.7%	41.0%	58.4%
Sara Lee	49.6	73.5	47.5	64.9
Shell Oil	41.0	64.8	44.6	62.1
Sun	38.9	62.7	27.3	44.7
Tenneco	49.1	73.0	49.1	66.5
Texaco	44.0%	67.9%	48.6%	66.0%*
Time Warner	40.8	64.6	41.0	58.5
Unilever U.S.	43.5	67.4	43.3	60.7
Union Carbide	39.9	63.8	40.9	58.3
Unisys	36.7	60.5	18.8	36.2
United Technologies	40.8%	64.6%	40.4%	57.8%
Unocal	41.0	64.8	44.2	61.6
USX	49.6	73.4	55.6	73.0
Westinghouse	43.8	67.6	34.1	51.6*
Xerox	37.5	61.3	37.5	54.9
Average	42.5%	66.4%	41.3%	58.7%*

* Includes Employee Final Pay

Thrift Savings Plans Covering Salaried Employees of 50 Large Industrial Companies

The following has been extracted from A Survey of Retirement, Thrift, and Profit Sharing Plans Covering Salaried Employees of 50 large U.S. Industrial companies as of January 1, 1991. The Wyatt Co.

Company	**Employee Contribution**	**Employer Contribution**
Allied-Signal	1%-8%	If 5 years of participation, 100%; otherwise, 50%.
Aluminum Co. of America	1-4 years, 4%; 5-9 years, 4%-6%; over 9 years, 4%-8%.	60%
Amoco	1-9 years, 1%-4%; 10-14 years, 1%-5%; over 14 years, 1%-6%.	100%
Anheuser-Busch	2%-6%	33 1/3% to 75% depending on company net income. (Projections based on 50%.)
Ashland Oil	1%-6%	20% if eligible for leveraged ESOP, 70% otherwise. (Projections based on 20%.)
AT&T	2%-6%	66 2/3%
Caterpillar	2%-6%	1-24 years, 50%; 25-34 years, 66 2/3%; 35 years and over, 80%.
Chevron	None	2% of pay, if employee contributes to profit sharing plan. (Projections based on 2% of pay.)
Chrysler	1%-4%	60% after 1 year
Coastal	0-2 years, 2%; 3-4 years, 2%-4%; 5-6 years, 2%-6%; over 6 years, 2%-8%.	100%
Coca-Cola	1%-3%	100%
ConAgra	1%-4%	50%
Digital Equipment	None	Not Applicable
Du Pont	1%-6%	50%
Eastman Kodak	None	Not Applicable

Company	Employee Contribution	Employer Contribution
Exxon	6% after-tax, or before-tax as needed.	100% plus additional contribution of 0.1667% for ever 1% of company match the employee directs into ESOP. (Projections assume employee directs all to ESOP.)
General Dynamics	2%-10% of pay up to $25,000; 2%-6% of excess.	100% if employee contributions invested company stock, otherwise 50% (Projections based on 100%.)
General Electric	1-3 years, 1%-6% over 3 years, 1%-7%.	50%
General Motors	1%-10%	70%
Georgia-Pacific	1%-6%	75% of first 3% of basic, plus 50% of next 3% of basic, plus an additional amount equal to 3% of pay up to $100,000.
Goodyear	1%-6%	50%
Hewlett-Packard	1%-6%	33 1/3%
International Paper	2%-8%	70% of first 4% of basic, 50% of next 4%
ITT	2%-6%	50% plus an additional amount equal to 0.5% of base pay.
Johnson & Johnson	3%-6%	75%
Lockheed	2%-8%	60%
Mobil	None	6% of employee base pay.
Monsanto	1.5%-7%	60%
PepsiCo	None	Not applicable
Phillips Petroleum	1%-5%	25% if employee contributions invested in company stock, otherwise 15%. (Projections based on 25%.)
RJR Nabisco	2%-6%	50%
Rockwell International	1%-8%	75%
Sara Lee	None	Not Applicable
Shell Oil	None	% of pay: 2-5 years, 2.5%; 6-9 years, 5%; over 9 years, 10%.
Sun	1%-5%	100%

Company	Employee Contribution	Employer Contribution
Tenneco	4%-8%	100% subject to following limits: 1-3 years, 4%; 4-5 years, 5%; 6-7 years, 6%; over 7 years, 8%.
Texaco	3%	Approximately 200%
Time Warner	2%-6% up to $3,000.	66.7%
Unilever U.S.	2%-6%	100% of first 2% of basic, 50% of next 4%.
Union Carbide	2.5%-7.5%	50%
Unisys	None	Not Applicable
United Technologies	2%-6%	60%
USX	1-9 years, 1%-3%; 10-14 years, 1%-3.5%; over 14 years, 1%-4%.	100% if employee deferral is at least 2%.
Westinghouse	2%-6%	50%

Thrift Plan Benefits Projected

Extracted from: The Wyatt Company, A Survey of Retirement, Thrift, and Profit-Sharing Plans Covering Salaried Employees of 50 Large U.S. Industrial Companies as of January 1, 1991.

Life-Only Income Provided by Average Thrift Plan Accumulation as a Percentage of Final Pay.

	Retirement At	Employee	Employer	Total
Retirement in 2006 with 15 Years of Service	Age 65	12.6%	8.7%	20.4%
	Age 62	11.8	8.2	19.0
	Age 60	11.3	7.8	18.3
	Age 55	10.4	7.2	16.8
Retirement in 2016 with 25 Years of Service	Age 65	23.3%	16.4%	37.9%
	Age 62	21.8	15.3	35.4
	Age 60	20.9	14.7	34.0
	Age 55	19.2	13.5	31.2
Retirement in 2021 with 30 Years of Service	Age 65	29.4%	20.8%	47.9%
	Age 62	27.5	19.4	44.8
	Age 60	26.4	18.6	43.0
	Age 55	24.2	17.1	39.5
Retirement in 2023 with 32 Years of Service	Age 65	32.1%	22.6%	52.2%
	Age 62	30.0	21.2	48.8
	Age 60	28.8	20.3	46.9
	Age 55	26.4	18.6	43.0
Retirement in 2006 with 35 Years of Service	Age 65	36.2%	25.6%	59.0%
	Age 62	33.8	23.9	55.1
	Age 60	32.5	23.0	52.9
	Age 55	29.8	21.1	48.6

Sample of Private Sector Early Retirement Benefits

The following has been extracted from <u>A Survey of Retirement, Thrift, and Profit Sharing Plans Covering Salaried Employees of 50 Large U.S. Industrial Companies as of January 1, 1991</u>. The Wyatt Co.

	Early Retirement Benefits at Age 62 with 32 YOS		**Early Retirement Benefits at Age 62 with 32 YOS**		**Early Retirement Benefits at Age 55 with 30 YOS**		**Early Retirement Benefits at Age 55 with 25 YOS**	
	% of Benefit	**% of Final Pay**	**% of Benefit**	**% of Final Pay**	**% of Benefit**	**% of Final Pay**	**% of Benefit**	**% of Final Pay**
Allied-Signal	100.0%	36.9%	99.2%	33.7%	98.1%	31.7%	89.4%	29.4%
Aluminum Co. America	100.0	38.7	100.0	36.9	100.0	38.6	53.9	16.1
Amoco	100.0	41.3	100.0	40.5	69.6	31.5	69.7	26.2
Anheuser-Busch	100.0	48.1	85.0	38.2	70.0	26.8	70.0	25.5
Ashland Oil	100.0	42.5	94.0	37.5	75.0	29.9	75.0	24.9
AT&T	100.0%	41.3%	100.0%	39.1%	100.0%	39.1%	100.0%	33.5%
Caterpillar	100.0	42.9	92.0	37.1	72.0	33.4	72.0	24.1
Chevron	100.0	37.4	94.2	31.7	67.6	22.8	68.2	18.6
Chrysler	100.0	44.8	88.8	40.2	70.5	35.5		
Coastal	100.0	37.9	92.0	32.5	72.0	21.9	72.0	20.9
Coca-Cola	100.0%	37.2%	94.0%	34.7%	79.0%	32.5%	79.0%	27.0%
ConAgra	100.0	37.6	100.0	35.2	71.0	25.1	71.0	20.9
Digital Equipment	80.0	31.7	66.7	24.8	50.0	18.6	50.0	15.5
Dow Chemical	100.0	38.3	100.0	36.5	100.0	36.9	100.0	25.1
Du Pont	100.0	36.3	100.0	34.0	85.0	28.9	75.0	21.3
Eastman Kodak	100.0%	39.4%	100.0%	36.9%	100.0%	36.9%	75.0%	23.1%
Exxon	100.0	40.1	100.0	39.1	75.0	31.2	75.0	26.0
General Dynamics	100.0	38.1	95.0	33.9	90.4	32.8	82.5	24.6
General Electric	99.6	32.0	99.3	32.4	Not Eligible			
General Motors	100.0	46.8	91.6	43.4	67.5	40.2	46.0	17.2

	Early Retirement Benefits at Age 62 with 32 YOS		Early Retirement Benefits at Age 62 with 32 YOS		Early Retirement Benefits at Age 55 with 30 YOS		Early Retirement Benefits at Age 55 with 25 YOS	
	% of Benefit	% of Final Pay	% of Benefit	% of Final Pay	% of Benefit	% of Final Pay	% of Benefit	% of Final Pay
Georgia-Pacific	78.3%	39.1%	66.7%	31.5%	41.5%	20.0%	40.5%	16.2%
Goodyear	100.0	40.8	94.2	36.8	79.8	32.4	66.4	20.9
Hewlett-Pakard	80.0	23.8	66.7	19.0	50.0	13.5	50.0	11.2
International Paper	100.0	36.6	92.0	31.4	72.0	25.2	72.0	20.2
ITT	100.0	46.5	100.0	45.7	71.1	35.2	71.3	30.8
Johnson & Johnson	100.0%	36.8%	92.0%	31.8%	72.0%	25.0%	72.0%	20.9%
Lockheed	100.0	40.4	100.0	37.9	100.0	37.9	87.5	27.6
Minnesota Mining & Mfg.	100.0	39.8	100.0	41.0	75.0	28.0	75.0	23.3
Mobil	100.0	40.0	100.0	37.6	75.0	28.2	75.0	23.8
Monsanto	100.0	42.3	100.0	40.2	100.0	41.1	100.0	34.3
Motorola	80.0%	13.7%	66.6%	11.3%	50.0%	8.5%	50.0%	8.2%
PepsiCo	100.0	40.0	92.0	34.9	72.0	26.1	72.0	23.9
Philip Morris	100.0	45.5	100.0	42.2	100.0	41.0	70.0	23.9
Phillips Petroleum	100.0	36.7	90.0	30.8	65.0	21.9	65.0	18.2
RJR Nabisco	100.0	45.5	100.0	43.5	100.0	44.9	65.0	25.0
Rockwell International	100.0%	39.8%	100.0%	38.8%	100.0%	37.7%	64.0%	19.4%
Sara Lee	100.0	45.9	90.0	39.3	65.0	26.6	65.0	25.0
Shell Oil	100.0	42.3	100.0	40.7	70.0	31.5	69.2	26.0
Sun	100.0	39.9	100.0	40.3	82.1	30.8	83.4	25.1
Tenneco	100.0	44.9	94.0	39.6	64.0	26.9	64.0	22.5
Texaco	100.0%	39.9%	100.0%	37.5%	75.0%	28.3%	75.0%	23.8%
Time Warner	100.0	38.4	100.0	40.6	89.7	35.6	100.0	32.1
Unilever U.S.	100.0	39.1	100.0	36.3	100.0	35.3	80.0	23.5
Union Carbide	100.0	36.5	100.0	34.3	100.0	34.3	75.0	21.5
Unisys	100.0	33.6	88.0	27.7	58.0	18.2	58.0	15.2

	Early Retirement Benefits at Age 62 with 32 YOS		Early Retirement Benefits at Age 62 with 32 YOS		Early Retirement Benefits at Age 55 with 30 YOS		Early Retirement Benefits at Age 55 with 25 YOS	
	% of Benefit	% of Final Pay	% of Benefit	% of Final Pay	% of Benefit	% of Final Pay	% of Benefit	% of Final Pay
United Technologies	100.0%	37.3%	95.2%	33.7%	83.2%	29.6%	83.2%	25.5%
Unocal	100.0	39.3	94.0	35.3	69.0	26.9	69.0	22.7
USX	100.0	46.2	97.5	42.9	84.7	33.5		
Westinghouse	100.0	41.3	100.0	41.0	Not Eligible			
Xerox	100.0	37.5	90.0	33.8	65.0	24.4	50.0	15.6
Average	98.4%	39.2%	94.0%	35.9%	78.0%	30.1%	71.5%	22.7%

Private Sector Employer Interview
Weyerhauser Corporation

Interview with Marylyn Wilfong, Retirement Administrator, Weyerhauser Corporation.

Weyerhauser has a defined benefit plan for salaried employees. It is integrated with Social Security. Eligibility for normal retirement benefits occurs at age 65. The benefit formula is:

1.0% X AFC (high 5/10) X YOS

The company gave one ad hoc COLA in 1989. This was the first one in ten years.

In addition to their basic pension, salaried employees may also participate in a 401(k) plan. The company will match up to 5% of salary with company stock. Employees have the opportunity to increase or reduce their participation in this plan once a year.

Hourly employees have a separately negotiated non-contributory plan at each work site. They have never been awarded a COLA.

Ms. Wilfong identified several trends in private sector retirement plans:

- Fewer incentives for early retirement
- Job sharing
- Trial retirement (a retiree has three months to decide if he or she wants to return to work)
- Allowing employees to move to other jobs within the company
- Adding incentives to continue in employment

Weyerhauser's disability program is tied to a disability finding by Social Security. They have an aggressive reemployment program for those disabled on the job.

Appendix L

Cost Projections for the Early Retirement Proposals

Early Retirement Proposals
Lower Retirement Ages

In Millions	PERS	TRS	LEOFF	TOTAL
Retirement Age 62 (55 LEOFF)				
State & K-12 Biennial Cost 1993-95	$66	$46	$4	$116
6 Year Cost 1993-99	$243	$178	$14	$435
25 Year Cost 1993-2018	$2,515	$2,164	$155	$4,833
Increase in Member Rate	1.32%	1.94%	1.22%	
Average Increase in Member Cost 1993 (In dollars)	$382	$660	$525	
Retirement Age 60 (53 LEOFF)				
State & K-12 Biennial Cost 1993-95	$89	$58	$7	$154
6 Year Cost 1993-99	$328	$224	$24	$576
25 Year Cost 1993-2018	$3,390	$2,727	$260	$6,377
Increase in Member Rate	1.78%	2.45%	2.05%	
Average Increase in Member Cost 1993 (In dollars)	$516	$832	$881	
Plan I Retirement Age				
State & K-12 Biennial Cost 1993-95	$143	$91	$9	$242
6 Year Cost 1993-99	$524	$351	$32	$907
25 Year Cost 1993-2018	$5,424	$4,275	$348	$10,047
Increase in Member Rate	2.84%	3.84%	2.75%	
Average increase in Member Cost 1993 (In dollars)	$825	$1305	$1,181	

Totals may not agree due to rounding

Early Retirement Proposals
Subsidize Factors

Source: Office of the State Actuary

In Millions	**PERS**	**TRS**	**LEOFF**	**TOTAL**
6 2/3% for 5 Years				
State & K-12 Biennial Cost 1993-95	$17	$13	<1	$30
6 Year Cost 1993-99	$62	$49	$1	$112
25 Year Cost 1993-2018	$645	$591	$8	$1,245
Increase in Member Rate	.34%	.53%	.06%	
Average Increase Member Cost 1993 (In dollars)	$98	$180	$28	
5% for 10 Years				
State & K-12 Biennial Cost 1993-95	$34	$23	<1	$57
6 Year Cost 1993-99	$123	$89	$1	$214
25 Year Cost 1993-2018	$1,275	$1,087	$12	$2,374
Increase in Member Rate	.67%	.98%	.10%	
Average Increase in Member Cost 1993 (In dollars)	$194	$332	$42	
1% for 10 Years (8 LEOFF)				
State & K-12 Biennial Cost 1993-95	$101	$66	$6	$173
6 Year Cost 1993-99	$371	$254	$22	$647
25 Year Cost 1993-2018	$3,835	$3,096	$236	$7,167
Increase in Member Rate	2.01%	2.78%	1.86%	
Average increase in Member Cost 1993 (In dollars)	$583	$945	$800	

Totals may not agree due to rounding